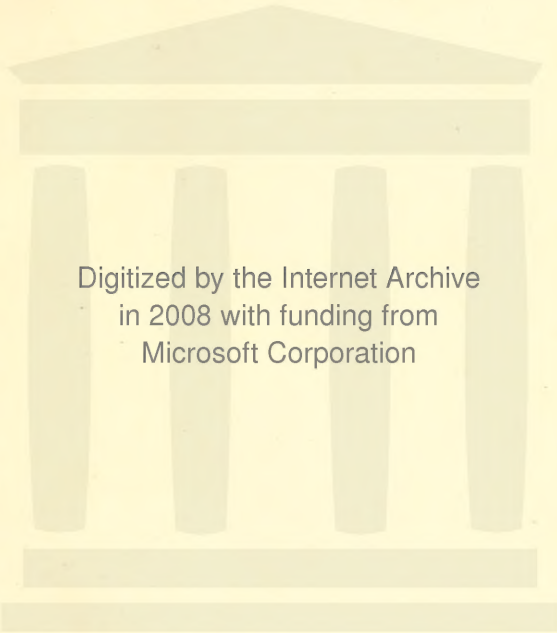
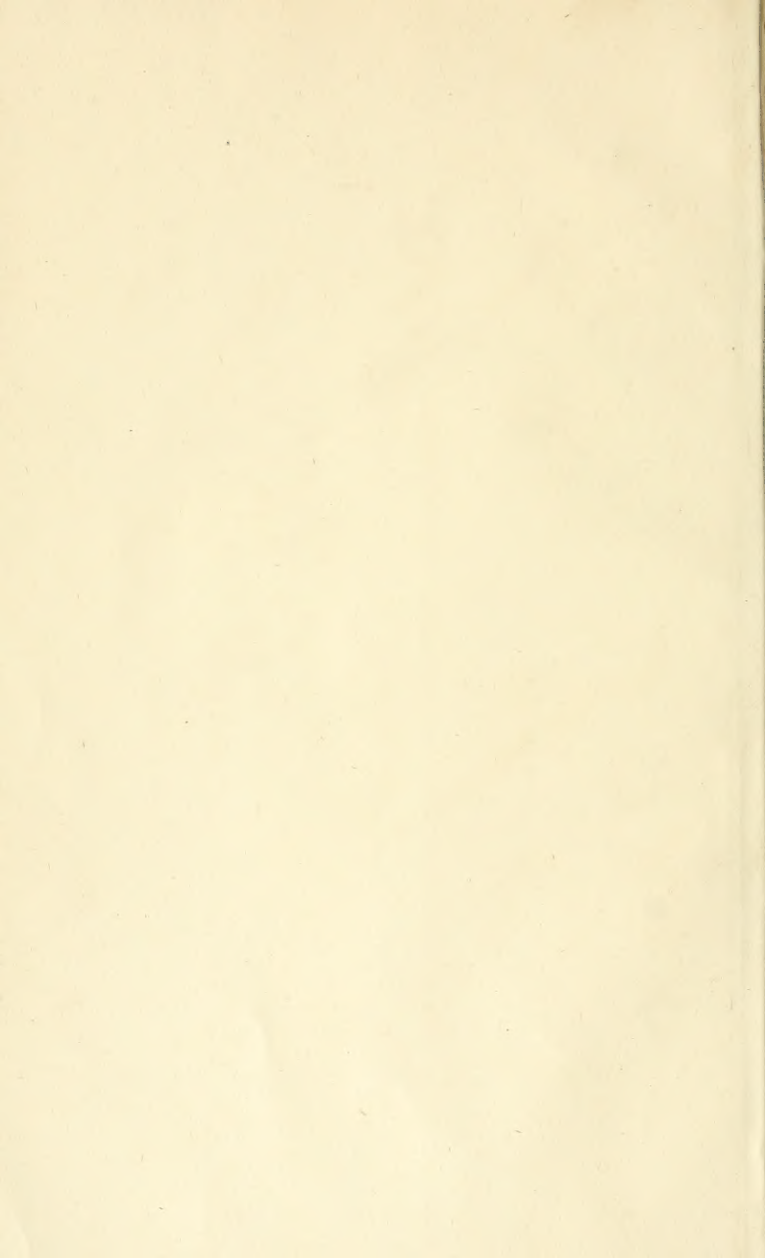


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JOHN BARRETT, DIRECTOR GENERAL.
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Panama Señor DON RAMÓN M. VALDÉS,
Office of Legation, "The Portland," Washington, D. C.
Peru Señor DON FEDERICO ALFONSO PEZET,
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Salvador Señor DON FEDERICO MEJÍA,
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Office of Legation, 1017 Sixteenth Street, Washington, D. C.

CHARGÉS D'AFFAIRES.

Ecuador Señor Dr. S. S. WITHER,
Office of Legation, 31 Broadway, New York City.
Mexico Señor DON ARTURO DE LA CUEVA,
Office of Embassy, 1413 I Street, Washington, D. C.

[Paraguay has at present no representative on the Governing Board.]

¹ Absent.

CORCOVADO.

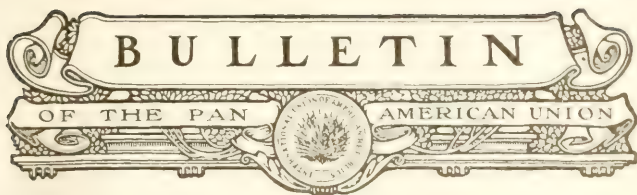
From the summit of rare Corcovado
In the dulcet decline of the day
I look upon Rio Janeiro
And her islanded, garlanded bay.
White and green break the wavelets at Leme
Gold and purple are blooms of the hill;
Nor Naples, nor Sydney, nor "Frisco"
Can vie with the pride of Brazil.

The city lies far and diminished,
The air is as velvet and balm,
Toward the sky, that bends gracious in greeting
Flaunt responsive the fronds of the palm.
The butterflies wave their blue banners
The humming birds balance and dart;
But life struggles yonder half fiercely
Through Rio from palace to mart.

Petropolis nests in the northward
Midst billowy mountains of blue
Paqueta floats midway in silver
Like an emerald gleaming in dew
Above us, majestic Tijuca
Lifts proudly to heaven her horn
Her graces the forests primeval
With tropical glories adorn.

I know not, O Rio, what sorrows
Thy million of mortals may whelm;
But in thy great hills' inspiration
Some hero shall stay at the helm.
As from Sinai, Nebo, and Carmel
Resounded the voice of the Lord—
So from thee, O sublime Corcovado,
Shall echo His Wonderful Word.

L v F Randolph.



VOL. XXXVI

JANUARY, 1913

NO. 1

EIGHTY DAYS WITH THE "BLUECHER" PARTY

VII.

THE BEAUTIFUL CAPITAL OF BRAZIL AND ITS ENVIRONS.

AT 7.30, on the morning of March 12, 1912, the *Bluecher* dropped anchor in the harbor of Rio de Janeiro. There is nothing particularly startling in that statement, and to one who has never been aroused from a sound sleep to take a hasty glance out of an open porthole to view for the first time the bay of Rio de Janeiro, with its marvelous beauties and the wonderful dreamland city on its shore, it will mean but little.

To one who has been there, however, it will mean much: for who that has eyes to see and soul to stir can forget the scenic beauty that bursts upon his vision when the early morning sun bathes in its golden glory the bluish bay set with its island jewels, the snow-white walls of distant villas framed in the emerald of tropic plant and clinging vines, while in the background Corcovado, Tijuca, Gavea, and the farther mountains of the Serra dos Orgaos rise from a sea of green through circling mists with topmost peaks outlined in bold relief against a cloudless sky of blue? No, Rio once seen will never be forgotten, though time may gradually confuse the clear outlines of the image and the recollection of its beauties be mingled with those of bygone dreams and pictures fair painted on the filmy tulle conjured up by fancy's magic wand. Even as the touch of a dream hand shatters the beauties of a delightful dream, so does life soon but destroy the charming visions that linger in misty memories of

* By E. L. A. A. of Pan. American Union Staff. The trip to Corcovado, Rio de Janeiro, was written by Mr. L. V. F. Randolph, of Plainfield, N. J., a member of the Bluecher party, immediately after the return from the trip to the top of the mountain.



GLORIA GARDEN, RIO DE JANEIRO, BRAZIL.

Gloria Garden is one of the new parks on the water front of the Bay of Rio de Janeiro, laid out in accordance with the recent plan for the beautification of the capital. The fine driveway of Boia Mar, or Bayside Drive, extends through this garden and along the beach a distance of 4½ miles.

certain scenes that can not be described. Of such is the vision of Rio and her "islanded, garlanded bay" — a vision of such rare beauty that even a poet's inspiration could not describe nor an artist's brush depict it.

Refraining, therefore, from any attempt to give the reader an idea of the beauty of the scene, the writer will endeavor to tell, as best he may, of a few of the things that the casual sojourner in Rio may see and enjoy in a week's stay, and incidentally a little of what our southern neighbors, the Brazilians, have accomplished in the way of building an ideal "city beautiful."

That "Rio de Janeiro" means "River of January" most people probably know. The Portuguese explorer who first sailed past the "Pão d'Assucar," or Sugar Loaf, through the rock-guarded entrance of the bay thought he had entered the wide mouth of a river, and, since it happened in the month of the double-faced Janus, he promptly misnamed it. The name, however, is beautiful and melodious, and it is just as well that it has never been changed.

The city lies mainly upon the southwestern side of the bay, although some of the suburbs have built on the dividing tongue of land which separates it from the Atlantic. The shore of the bay is taken up for perhaps a half dozen miles with the city, which is divided by several ridges extending down from the mountains to the water's edge. From the top of Corcovado, of which more anon, Rio de Janeiro seems to be more of a collection of cities built around the several inlets than just one great metropolis. These sections are connected, however, by fine avenues, and wherever the lay of the land permits the city spreads out. Beautiful villas are found clinging to the sides of cliffs of luxuriant green, overlooking compact groups of houses built in the level spaces. There is no sameness to weary the visitor to Rio. Mountains rise up from the midst of the city itself and overlook the magnificent boulevards that skirt along the blue waters of the bay.

On the ridge that divides the bay from the ocean, standing like a grim sentinel on duty at the harbor's entrance, is the Sugar Loaf, the great granite rock over 1,300 feet in height, resembling more an enormous blackened egg standing on its smashed larger end than a loaf of sugar. Very few have scaled its precipitous sides; but since the writer's visit an enterprising company has commenced the construction of an aerial railway, by means of which visitors will be enabled to reach the top in cars swung from a heavy cable. Thus future sight-seers will enjoy a new panoramic view of the beautiful city. The Sugar Loaf is probably the best known feature of Rio's harbor, for every photographer that ever trained his camera on the city has managed to include it in the landscape.

Passing the Sugar Loaf and rounding the point on which is built the Fortaleza de São João, the fortress which guards the western entry



VIEW OF BOTAFOGO, RIO DE JANEIRO.

Circling around this portion of the bay is the splendid driveway, the Avenida Beira Mar. The sharp peak in the background is Corcovado, the "Hunchback," from the top of which may be seen the magnificent view of Rio de Janeiro, near-by mountains, and the bay, described in the article.

of the entrance, you float into the placid waters of a landlocked bay, which is 20 miles long and nearly 14 miles across its greatest width—an inland sea capable of harboring the combined navies of the world. Something over 100 islands and islets stud its blue waters like emerald jewels, varying in size from the Ilha do Governador, which has a circumference of 25 miles and boasts of a town called Paramapuam, down to small wave-worn rocks which persist in peeping up above the water line, their grotesque forms often capped with a palm tree or two and other tropical vegetation. This Governors Island, by the way, was once owned by one Miguel Ayres Maldonado, whose widow sold it in the early years of the seventeenth century to Salvador Corrêa de Sá, one of the early governors of Rio de Janeiro, hence its name. Here King John VI had his hunting park, and here also was located a Benedictine monastery, where once were celebrated the splendid religious ceremonies of that order. The marine hospital is located there now, and among other industries carried on is the manufacture of bricks and tiles.

The next largest island of the bay is Paquetá, where may be seen beautiful little villas set in gorgeous gardens, shaded paths, high palms, and radiant flowers galore—an ideal place for rest and recreation and dreams of "douce far niente." A product of this little island is kaolin, and it is said that as far back as 1815 a porcelain service was made of this clay for John VI.

As our boats were towed from the *Blucher* to the landing we passed close to Fiscal Island, formerly the site of a summer palace of Dom Pedro II, now transformed into the customhouse. To the right of this is the Ilha das Cobras (Isle of Serpents), a most picturesque spot, on which is located the marine arsenal and other buildings.

We landed at the Caes Pharoux, a stone and concrete quay, close to the Jardim da Praca Quinze de Novembro, which contains a fine monument erected to the memory of Gen. Ozorio. Here a line of carriages drawn by fine, sleek, well-groomed mules awaited the party for the initial drive through the city. In Rio the "swellest" carriage teams are mules. These, for some reason probably because they thrive better in this climate—have almost entirely supplanted horses. With their elevation in the social scale of animal society they seem to have developed a more amiable disposition as well as a more spirited and stylish appearance, much as their newly rich human prototypes in some other countries we wot of, and some of these teams could give good account of themselves in a race with some of the fast roadsters in the United States.

The first impression made on the traveler who starts sight-seeing in Rio de Janeiro is that here at last he has found a positively clean city. In this respect the writer knows of but one city in the United States that can be even compared with it—and that is Washington.



Photo by L. C. Moore - Sharon, Pa.

PRAÇA QUINZE DE NOVENBRO, RIO DE JANEIRO.

This is the first park the visitor sees upon landing at the Caes Pharoux. In the background may be seen one of the new skyscrapers being erected in Rio de Janeiro.



Photo by L. C. Moore - Sharon, Pa.

CAES DA LAPA AND MORRO DA GLORIA, RIO DE JANEIRO.

The Morro da Gloria (Gloria Hill) is the end of a promontory which juts out into the Bay of Rio de Janeiro, on which are clusters of picturesque villas set among palms and other tropical trees. In the left background is seen the Sugar Loaf, guarding the entrance of the bay.

But for scientific sanitation and scrupulous cleanliness the Brazilian capital goes even our own a few better, for not only do they sweep the streets but they wash and scrub the principal thoroughfares with water and wash off the walls of the houses, as far as they can conveniently reach with the hose, every night. Upon the two occasions that the writer and his companions were out in the city after 11 p. m. and walked from the Avenida Rio Branco down to the Caes Pharaux, they were repeatedly compelled to dodge the hose and water-slushing scrub men of the street-cleaning department who were engaged in this work. We stopped long enough to see them scrub the street, the sidewalk, and the walls of the adjacent stores and were told that this was a nightly occurrence. No wonder that Rio's sidewalks look as clean as the tiled floors of fine interiors. Dr. Oswaldo Cruz and his assistants have taught the city the value of cleanliness, and from the fever-stricken, disease-laden port of 12 or 15 years ago it has become a splendid health resort. When any person is the victim of a contagious disease the authorities do not depend upon the occupants of the premises to disinfect it. They send a squad of sanitary police, in spotless white uniforms, supplied with the latest sanitary appliances and germ-killing devices, and when they get through with a house it is disinfected from "turret to foundation stone," inside and out. They may burn up some of your clothes, your bedding, and other belongings, but when you leave the premises you will not be an animated, circumambient germ distributor and general menace to the public health. Hence epidemics are things of the past in Rio de Janeiro.

Our drive along the First of March Street showed us some of the finest business houses, among them being the Bourse, a massive structure built entirely of granite. Granite, by the way, is quarried in the mountains close to the city and is the favorite building material in all the fine public buildings, quays, and public works generally. The next handsome building to attract our attention was that of the Rio de Janeiro Tramway, Light & Power Co. As we drove by the beautiful white front of this palatial structure Mr. Edward J. Hall, of New York, with whom the writer happened to be sharing the carriage, remarked, "That looks very much like our terra cotta." Upon consulting a memorandum in his pocket he found that a terra-cotta manufacturing company, in which he was a stockholder and of which he had been president, had furnished the artistic front upon which we were gazing with so much interest and which made this one of the show buildings of Rio. Even the writer felt a little thrill of pride in seeing this evidence that American products were adding to the beauty of the Brazilian metropolis.

The Praça de Republica was the first fine park we came to. It is located in the heart of the main part of the city and it was here that



A BAMBOO GROVE, BOTANICAL GARDEN, RIO DE JANEIRO.

The spacious grounds cover an area of nearly 2,000 acres, situated on the border of the large suburban lake, Rodrigo Freitas, which is near the seacoast and separated therefrom by only a narrow strip of sand. Trolley cars from Rio pass the main entrance. This world-famed institution is supported by the General Government for the purpose of botanical research and climatological experiments. Its natural beauty is further enhanced by the tropical luxuriance of Brazilian forests, the choicest specimens of native flora preserved in all their artistic settings, and many trees and rare plants from foreign lands.



MUNICIPAL THEATER AT RIO DE JANEIRO.

This handsome structure, which is one of the many notable buildings to be found on the Avenida Rio Branco (formerly the Avenida Central), is one of the most beautiful and best-equipped theaters in the world. Its dome, 147 feet high, is surmounted by a gilded bronze eagle whose outstretched wings measure 20 feet.



AV. NUNO ALDO BRANCO, RIO DE JANEIRO, BRAZIL.

Completed in 1913, and completed in 27 months, at a cost of about \$7,500,000. The new street is 100 feet wide, and is paved with asphalt. It is the widest street in the city, and is the most important thoroughfare. It is the most important thoroughfare in the city, and is the most important thoroughfare in the city.



Courtesy of Ilustracao Brasileira.

THE NEW TERMINAL OF THE RIO DE JANEIRO TRAMWAY, LIGHT AND POWER
CO., RUA MARECHAL FLORIANO, RIO DE JANEIRO, BRAZIL.

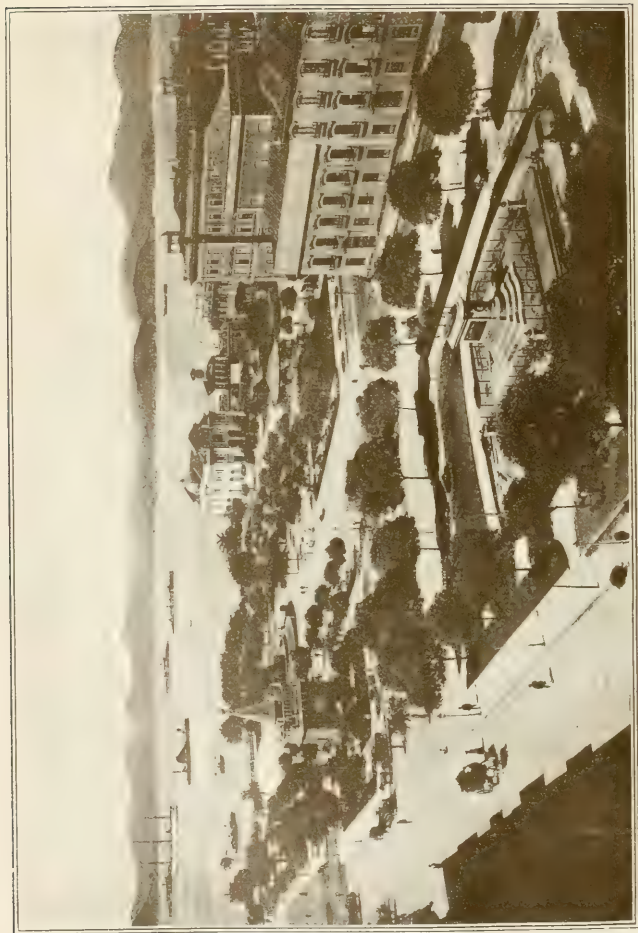
Brazil's independence from the mother country, Portugal, was first proclaimed. It was formerly known as the *Praga de Aclamação*, but upon the overthrow of the empire and the establishment of the republic the name was changed. Artistic benches, fine palms and shade trees, little streams and lakes upon whose glassy surfaces sported aquatic birds, among them splendid specimens of white and black swans, fine collections of animals representing the fauna of the country, afternoon band concerts, and other pleasing features combine to make this one of Rio's most popular places for recreation.

It was in the *Praga Tiradentes*, however, that we found one of the most artistic and elaborate monuments in South America. This is the heroic equestrian statue in bronze of Dom Pedro I, executed by the celebrated French sculptor, Roedel. It was unveiled March 30, 1862, and in artistic conception and finished execution is unexcelled on the American continent. The Emperor is represented as proclaiming the independence of Brazil on the banks of the Rio Ypiranga. On each of the four sides of the great pedestal of the statue is an artistic allegorical group of Indians representing the four great rivers of the country: The Amazon, the Parana, the San Francisco, and the Madeira. About each group of Indians are sculptured figures representing the fauna of the respective regions. Among those typifying the Amazon valley are a crocodile, a jaguar, and a boa constrictor; an enormous river turtle represents the Madeira; a tapir, an armadillo, and an ostrich the Parana; and an anteater of huge proportions the San Francisco. The inscription, "A Dom Pedro I. Gratidão dos Brasileiros," bears testimony of the gratitude of the Brazilian people.

The chief beauty of the parks and gardens of Rio lies, of course, in the magnificent tropical trees, plants, and flowers, verbal descriptions of which are futile to convey an idea of the luxuriant coloring and the charm of this profusion of vegetation seen in our own country only in dwarfed forms in our conservatories.

Our carriages finally turned into the Avenida Rio Branco, that magnificent thoroughfare formerly known as the Avenida Central. It is characteristic of the ardent temperament of the Brazilian people that immediately upon his death they should have honored the memory and so appropriately shown their appreciation of their best loved and most widely known statesman by giving his name to the most beautiful avenue in their greatest city. We learned of the death of the Baron Rio Branco while in Buenos Aires and within less than a month the people of Rio had not only given his name to the avenue but had become accustomed to it and were calling it that.

This avenue, like the Avenida de Mayo of Buenos Aires, stands as an imperishable monument to the wonderful energy of the Latin race when once aroused to action. It was during the administration of



THE "PRAÇA 15 DE NOVENBRO," RIO DE JANEIRO, BRAZIL.

In the foreground is the statue of Gen. Osório, one of the military heroes of Brazil, while in the background may be seen a portion of the splendid Bay of Rio de Janeiro.

Dr. Rodrigues Alves as President of the Republic that the regeneration of Rio was begun. Determined to place the Federal District of Rio de Janeiro in the hands of a man strong enough to execute the plans for the sanitation and remodeling of the city, he appointed Dr. Passos, who as the head of the National Railways of Brazil had shown himself to be a master of great constructive work, as prefect. At once things began to materialize. Among the many great improvements contemplated was the opening and construction of a great central avenue, straight through the main portion of the city and extending from one water front to the other; from the Avenida do Caes, where the great port works were to be constructed, over to the Avenida Beira Mar, the great boulevard sweeping along the curved bay, on the other side. A thousand or so of old houses and some dingy, crooked streets were to be eliminated, but what of it? The administration went quietly to work, the great fund was raised by a bond issue, the right of eminent domain was invoked, the prefect and his administrative helpers were given somewhat extraordinary powers by the National Congress, houses and other property along the surveyed route were condemned and disappeared even in a night, and the way was cleared. Great was the protestation at first, but the owners were paid the price at which their property was assessed for taxes and, upon appeals to the courts, it was held that a man's sworn valuation of his property for purposes of taxation was a fair criterion to establish its value when it was wanted for the public benefit and there you are. In 18 months the avenida, pavement, sidewalks, trees, public buildings, all was an accomplished fact, and to-day it challenges the world to produce its equal as a beautiful business street.

Almost 120 feet wide and a mile and a quarter in length; lined with fine new stores, hotels, office buildings, cafés; one end given over to the Monroe Palace, the Municipal Theater, the National Library, the Museum of Fine Arts, and other public buildings; with its artistic black and white mosaic sidewalks and rows of fine shade trees; its brilliant electric lights mounted on artistic iron poles; its throngs of well-dressed people and continuous procession of fine automobiles and handsome carriages, Rio may well be proud of the Avenida do Rio Branco.

The limits of this article will permit mention of but a few of the public buildings visited during our stay. Prominently among these is the Municipal Theater, erected at a cost variously estimated at from \$3,500,000 to \$5,000,000. Regardless of its exact cost, however, it is one of the finest in the world. Located near the end of the avenida, its grand façade fronts on the Marechal Floriano Peixoto place. It is of the Renaissance style of architecture and its interior decorations of mural paintings, sculptured marbles and bronzes, its vitreaux, its grand stairway, patterned after that of the



ON THE WAY TO CORCOVADO'S UMBRELLA.

The Ruggenbach railway which winds to the top of Corcovado is about 23 miles in length. "And all along, over it, under it, by the side of it, is the dense undergrowth and brilliant vegetation of a primeval tropical forest, within the confines of a cosmopolitan city of 1,000,000 people."

Grand Opera House of Paris, its pillars of Italian marble are all on a scale of elegance and luxury not equaled in any of the large theaters of the United States. Its stage is very large and equipped with every modern convenience. The greatest singers of the world are heard here at times, and as much as \$25 each is paid for seats by subscription when some of the world's celebrities appear in grand opera.

The Escola Nacional de Bellas Artes (National School of Fine Arts) is also located on the avenida just across from the theater. It was closed to the general public while we were there, many of the fine paintings being still unmounted and scattered promiscuously throughout the several large halls. Upon presenting his credentials the writer and a companion were admitted one afternoon and spent a couple of hours most pleasantly in admiring the many art treasures shown us by one of the courteous attendants. Quite a number of fine old paintings by the masters were found, but we were especially struck with the work of some of Brazil's talented native sons. Among those whose works we noted particularly were Pedro Americo, Almeida Junior, Amoedo, Henrique Bernadelli, Brocos, Zepherino da Costa, Monteiro, Taunay, and Victor Meirelles. Among the fine sculptures the group "Christ and the Adulteress," by Rodolpho Bernadelli, was remarkable.

It was the National Library, however, which evoked the writer's greatest interest and admiration. The building, which is also on the avenida and close to the Academy of Fine Arts, is four stories above the basement floor and is built of granite, marble, and structural steel. The simplicity of its architecture, relieved by columns with Corinthian caps, is such that its classic lines make it more imposing and monumental to the beholder than many more ornate buildings. Its fine double staircase, large well-lighted reading rooms, artistically decorated galleries and halls, together with its thorough and up-to-date library equipment, can not be adequately described in this article. The history of this interesting library with a description of the building and its equipment will form the subject of a special article which will appear in an early issue of the Bulletin.

Another artistic building which interests visitors from the United States is the Monroe Palace. The building is practically the same which served as the Brazilian pavilion at the St. Louis Exposition. It was taken down and shipped in sections from the United States, rebuilt upon its present site, and given the name of "The Monroe Palace," in honor of that President of the United States whose policy had erected a bulwark of defense against European aggression in Latin America. Marble steps and other improvements have been added to the building, which is now used for holding conventions and large public meetings.



PANORAMA OF PART OF RIO DE JANEIRO, BRAZIL, AND THE ENTRANCE TO ITS BEAUTIFUL HARBOR.

--Lower still the white city gleamed, almost to the foot of the great cliff on which we stood, and yet so far away that its snowy
--Louises seemed but toys, while out beyond it was the picture of the bay with its many emerald islets.

To the traveler unaccustomed to Brazilian currency the price of about the first thing he wants to buy is somewhat staggering. Our first luncheon was taken at the Hotel dos Estrangeiros, and upon searching the wine list Mr. Hall found that his favorite brand of champagne was to be had. When the price was found to be 20,000 reis per bottle the writer suggested that he buy a farm instead. However, after some abstruse calculations were made on the basis of 1,000 reis being equivalent to about 33 cents United States, we realized that 20,000 reis was really a little over \$6.66, whereupon Mr. Hall, being a capitalist and not a farmer, scouted the tenderer's advice and closed the deal on the champagne. Habana cigars could be had from 1,000 reis on up to as much as you would stand for, while domestic brands were cheaper. Subsequent experience proved that very good meals and excellent service could be had at a leading restaurant for 3,000 reis per meal, exclusive of anything in the way of the "cup that cheers."

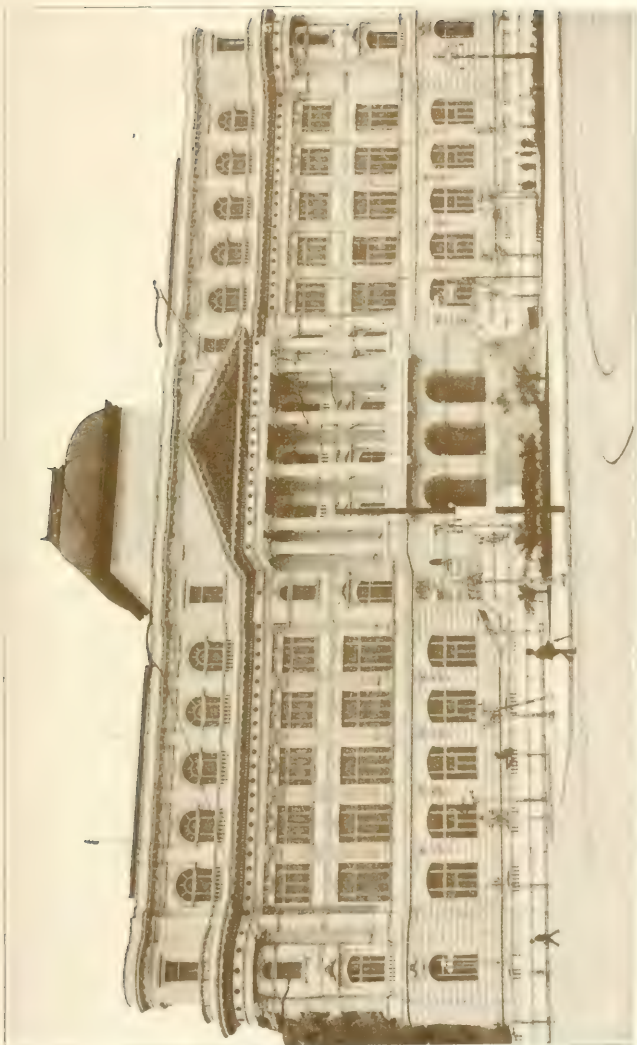
At 8.30 on the morning of the day after our arrival our party started on the trip to the top of Corcovado, the Hunchback. Special cars awaited us on the quay and the weather was ideal. It almost always is—in Rio. The sun's rays may get pretty warm during the early afternoon, but the ocean breezes keep one comfortable and the nights are always cool and pleasant. Our first stop was at the fine beach of the suburb Copacabana, which modern bath houses and a good hotel could make an ideal summer resort. At the café, where the dispensers of liquid refreshments must have been warned of our coming, we found beer that was fresh and actually cold, which was a pleasant surprise even at the price of 800 reis per glass.

From here we went to the Botanical Gardens, a fairy land of floral and arboreal gorgeousness. One avenue, leading from the entrance, is nearly a half mile in length and is bordered on both sides with the grandest rows of royal palms known to the world. There are 134 trees in the two rows, having an average height of over 85 feet. Many of them are over 100 feet, and their waving crowns of green top perfect trunks. Bamboo Avenue is another rare sight, shaded its entire length by the arching canes overhead. Statues, rustic benches, gorgeous flowers, and pretty lakes abound, on some of the last of which we found that queen of all water lilies, the *Victoria Regia*, in full bloom. Among the many tropical trees of interest to the visitor may be found the "milk" tree, whose latex is said to be used by travelers in the Brazilian wilds as a substitute for milk; the "traveler's" tree, whose sap is so profuse that in seasons of drought it furnishes water for the thirsty wanderer; one avenue was lined with camphor trees, while such rarities as the breadfruit, cacao, ebony, rubber, and the countless other varieties of trees peculiar to the Tropics could be found on every hand. Our time was too limited



AVENIDA DO MANGUE, RIO DE JANEIRO.

This splendid boulevard, lined on either side with double rows of magnificent palm trees, ornaments an open canal designed to drain this new portion of the city.



THE NEW YORK LIBRARY AT FIFTH AVENUE

THE NEW YORK LIBRARY AT FIFTH AVENUE. THE BUILDING WAS DESIGNED BY JAMES HENRY BOND AND WAS COMPLETED IN 1890. IT IS ONE OF THE MOST IMPRESSIVE BUILDINGS IN NEW YORK CITY.

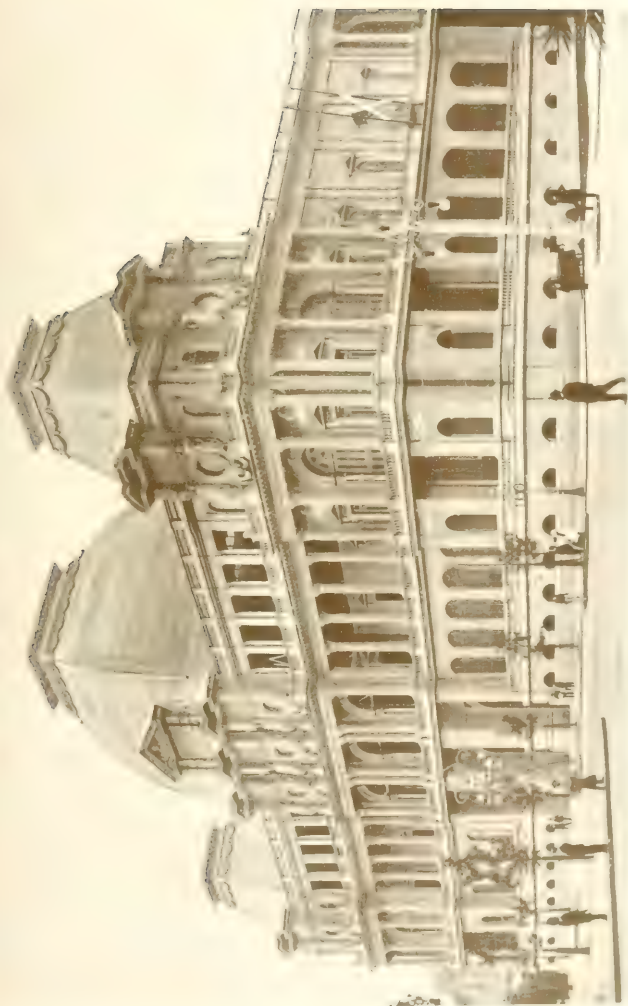
to see them all, for we had to leave for the station, where we were to take the remarkable railway to the top of Corcovado.

This railway is of the Riggenbach system, and an electrical engine provided with a cogwheel device and safety appliances in case of a sudden break pushes the cars up inclines which sometimes reach an angle of 30° . This ascent of Corcovado is beautiful beyond description, and to a nervous person must be at times quite startling. The road winds, curves, and turns sharp corners on the edge of precipices, runs over spidery trestles whose altitude above the yawning chasm of green foliage below makes even the boldest gasp, and then seems to cling to the side of some huge cliff without support of any kind. And all along, over it, under it, by the side of it, is the dense undergrowth and brilliant vegetation of the primeval forest—the real wilds of the Tropics within the confines of a city of 1,000,000 people. We were told that the wild monkeys could often be seen playing on the track in the early morning hours, and that huge snakes still abounded in the damp recesses of the forest.

At times, as you come to an unexpected opening on a sudden curve, you catch a glimpse of the city and bay beneath, but the picture stays for but a moment, and the next minute you gaze on the perpendicular side of some huge bluff surmounted by its crown of green. At an elevation of about 2,100 feet we found a pretty mountain hotel, the Hotel Paineiras, where we stopped for lunch. Here again are to be had some wonderful views of the distant ocean, the beach of Copacabana, the Lagôa Rodrigo de Freitas, and of the Botanical Gardens, which from this altitude looked like a tiny playground. The ancient aqueduct, built over 200 years ago and which once was the source of Rio's entire water supply, runs close by the hotel, and the road built alongside makes a most beautiful and romantic promenade for "lovers wandering mid the vine-clad hills." The aqueduct is built of granite, the moss-covered top being 3 or 4 feet wide, and varies in height according to the slope of the ground, sometimes being 5 or 6 feet above the roadway. It still furnishes part of Rio's pure water.

After lunch the cars took us up to the highest point of the road, and from here it was but a five or six minutes' climb by numerous stone stairways to the circular kiosk, which crowns the highest point and is known as Corcovado's Umbrella. A stone platform, with a wall about 5 feet high around it, leads out from this kiosk to the very edge of the tremendous precipice which overhangs the city of Rio de Janeiro, and here we saw the culmination of all that is grand and beautiful in scenic wonders.

At first a veil of clouds hung beneath us and hid the city and the bay from view. In a few moments, however, the winds gently dispersed the mists, the veil was drawn aside, and there, 3,000 feet



THE U. S. DEPT. OF COMMERCE BUILDING, NEW YORK

beneath us, unrolled a magnificent panorama that made us almost speechless. The afternoon sun was sinking close to the mountain tops in the western horizon, and its mellowing light was beginning to paint the filmy clouds with delicate rainbow colors while the shadows began to darken the valleys below. Misty wreathes seemed to cling to the neighboring peaks, while immediately beneath lay belts of forest growth, the tops of trees so massed that swaying breezes made them seem a sea of green. Lower still the white city gleamed, down almost to the foot of the great cliff on which we stood, and yet so far away that its snowy houses seemed but toys, while out beyond it was the picture of the bay with its many emerald islets, and still farther off the distant peak of "The Finger of God" was outlined against the darkening sky. Turn which way we would, enchanting pictures filled the eye, while just beneath and almost at us, flitting in and out among the wild flowers of brightest hue, were the great butterflies whose waving wings were solid blue. It seemed a fairyland unveiled to mortal eyes, and regretful sighs answered the shrill whistle's call which broke the spell and bade us leave the paradise.

The next day had been set aside for a visit to the little city of Petropolis, former summer capital of Brazil and site of the palace of Dom Pedro II. It was here that the court and diplomats lived when Rio became impossible because of epidemics in the days of yore, before its reconstruction and sanitation. Many of the foreign envoys still have their homes here in summer, and we had the pleasure of saluting the American flag as we drove past the palace now occupied by the ambassador from the United States. Petropolis is a beautiful, restful, picturesque little place with a population which varies somewhat with the seasons from 10,000 to 15,000 or more. Its chief charm lies in the route you take to get there. The first part of the journey consisted of a most enjoyable trip across the bay in a steam launch, passing the countless picturesque little islands and stopping at one of the prettiest, Paqueta, which has been mentioned heretofore. We left the boat at Maua, the station of the Leopoldina Railway, and were whisked up the mountains through wonderful scenery and up wonderful grades, passing a pretty little village on the way which clustered about an extensive cotton and wool factory. The return trip over the Bay of Rio de Janeiro at sunset was superb, but the writer will forego further attempts at scenic description, lest he be accused of exaggeration.

On the 15th we took the automobile trip to Tijuca, and if the writer is ever so fortunate as to return to Rio he will take the trip again—but not in an automobile. He will walk. Of all the wild, thrilling, hair-raising rides he can recommend the one to Tijuca in a fine machine with a chauffeur who speaks only Portuguese and can not understand even sign language, whose one fear is that he will fail to



AERIAL RAILWAY TO THE TOP OF THE SUGAR LOAF.

The car, driven by electricity, is suspended in the air on a heavy cable and is capable of carrying 20 persons. The entire trip of 1,400 meters will take but 12 minutes, and will afford visitors a new view of the city and Bay of Rio de Janeiro.



PETROPOLIS, A MOUNTAIN SUBURB OF RIO DE JANEIRO.

Here the foreign diplomats make their permanent homes because of the delightful climate and the proximity to the capital.

run over the fellows who have had the start of him and who evidently bears a charmed life. Otherwise he would have been killed. It was not so much because of the ripping speed with which we went up the inclines, but the almost impossible curves and turns, sometimes on the edge of precipices where the tops of giant trees some hundred or two feet below seemed to stretch out welcoming branches to impale you as you landed. In some places the larger machines had to go up a part of the sharp curve at an angle of 30 degrees, back for a few feet, and take a fresh start on a new angle to negotiate the turn at all. And this seemed generally to happen just on the edge of a bluff. And coming down was worse. The officers in charge of the expedition kept our chauffeur from starting until the machine in front had been gone five minutes. We started, and in three minutes came near running over it.

We knew that there was grand scenery all about us, for we saw some of it when we stopped at the top of Tijuca, some 4,000 feet high, but we had no time for scenery on the way up and down. We were busy holding on to the automobile to keep it from turning into an aeroplane. When we got down to the level earth once more we took an hour's spin around the most magnificent seaside boulevard in the world—the Avenida Beira Mar. It seems there is no speed limit on this driveway and we gave the chauffeur to understand that we knew we could not be killed now, so he "let her out," and his soul seemed happy.

Among the many places of unusual interest visited during our stay was the Quinta de Boa Vista, a park of unusual scenic beauty, in which is located the former palace in which resided in turn King John VI, Dom Pedro I. and Dom Pedro II. After the establishment of the Republic the palace became the home of the National Museum. The building was closed for repairs, and we had no opportunity to enjoy the many interesting collections it contains. One of its treasures we had repeatedly heard of is the enormous meteorite, the "Bendegó," thus named for the little stream in the State of Bahia, on whose banks it was discovered in the latter part of the eighteenth century, and which had been transported to the museum in 1888. By some chance this interesting wanderer from the unknown realms of space had been left lying on its pedestal in the large entrance hall and in full view from the iron-barred front door. We could even read the inscription on the pedestal. Its weight is said to be 5,360 kilograms, or about 11,000 pounds.

Rio furnishes a striking illustration of the value of water power. The Rio de Janeiro Tramway, Light & Power Co., which has a monopoly in furnishing the light and power for the city and its industrial plants and factories, derives its power from the falls of Ribeirao das Lages, 50 miles from the city, where it has a plant which generates



Fontaine de la Vierge, Paris

50,000 horsepower at present, and which is being increased to 80,000. The reservoir impounds 204,000,000 cubic meters of water.

All places of interest in the city and its environs are easily reached by means of the splendid car system. Fares are cheap and vary according to distance and class. In order to ride in a first-class car gentlemen are expected to wear coats and collars and must carry no packages or bundles. Coatless, collarless, and burden-carrying individuals are relegated to the second-class and cheaper accommodations. Only as many passengers as can be seated are permitted to board a car, and "strap hangers" are unknown.

Having noted various well-dressed gentlemen wearing rings with rather large stones on their forefingers, the writer inquired as to the reason for such display. He was told that it is customary in Rio for gentlemen of the learned professions to wear a ring or watch charm set with certain stones indicating their calling. Doctors wear emeralds; engineers, sapphires; dentists, garnets; lawyers, rubies; chemists, topaz, etc. These jewels are usually presented to the students by parents or admiring friends upon the occasion of their graduation, and ever after serve as marks of distinction.

Street vendors of ice cream and soft drinks transport their wares about in small carts shaped just like a ship, full rigged, and flying the tiny flags of many nations, in the place of the ugly and often dirty pushcarts we see in our cities.

Since so much remains to be told of Rio, the writer regrets that he has already used up much more than his allotted space. To those who travel and love the beauties of nature and seek rest or recreation in an ideal climate amidst ideal surroundings he would say, go to Rio de Janeiro. It's worth the price. If you can stand for but an hour at sunset on top of Corcovado and see the last rays paint the drifting clouds, the shadows of the mountains fall and deepen and Rio growing dim and dimmer in short, soft twilight, until suddenly the twinkling lights begin to appear in hundreds and then in thousands until far beneath you a fairy city lies outlined in little stars of light, and tiny specks of red and green and white show where the ships from all the ports of earth rest in the greatest, safest harbor in the world. It's worth the price for nowhere else on earth can just such sights be seen.



UNIQUE HONOR FOR HON. CHARLES H. SHERRILL.

ON January 9 the Midday Club of New York City was the scene of an interesting gathering when some 50 friends of Hon. Charles H. Sherrill, former United States minister to the Argentine Republic, gave a luncheon in his honor and provided an opportunity for the presentation to him of a gold medal from his friends in the Argentine Republic. Hon. John Bassett Moore, the distinguished authority on international law, presided at the luncheon and made an appropriate speech complimentary to Minister Sherrill and then introduced Dr. Rómulo S. Naón, the minister of the Argentine Republic in the United States, who, in a



GOLD MEDAL AWARDED TO MINISTERS FOR SHERRILL.

The gold medal was presented personally by Dr. Rómulo S. Naón, the Argentine minister to the United States, at the luncheon given by the Midday Club of New York City.

happy address, formally presented the medal to Mr. Sherrill. The latter replied in a carefully prepared speech, extracts of which appeared in most of the New York papers and were telegraphed to Latin America, where they were generally and interestingly commented upon. In the course of his remarks, this eminent diplomat made particular reference to Mexico, the Monroe Doctrine and the relationship of the United States to its sister republics. A full copy of this address can be obtained by addressing Mr. Sherrill personally at 30 Broad Street, New York City.

Both sides of the beautiful and artistic medal presented by the people of Argentina are reproduced in the accompanying illustration.

Those in attendance at the luncheon included the following representative men: Dr. Rómulo S. Naón, the Argentine minister to the United States, and Hon. Charles H. Sherrill, and Messrs. John B. Lewis,



HON. CHARLES H. SHERRILL,

Former United States Minister to the Argentine Republic, who was honored with a gold medal presented by the many friends which he acquired in Argentina during his official residence there.

H. K. Bird, Walter S. Brewster, Frederic Brown, James Brown, John Candler Cobb, J. W. Curtis, W. N. Dickinson, A. L. Doremus, E. O. Drake, Frederick H. Eaton, Thomas A. Eddy, J. H. Fahey, N. T. Fisher, Paul Fuller, jr., Joseph P. Grace, H. G. Hemming, A. Barton Hepburn, Frederick B. Jennings, Robert C. Kammerer, Judge Luce, John B. Langer, Chester W. Lyman, Charles F. Mathewson, Com. Miller, John Bassett Moore, William Clifford Moore, James R. Morse, Charles M. Muchnie, Lewis Nixon, Herbert L. Satterlee, J. L. Schaeffer, James A. Serynser, S. L. Selden, Henry Seligman, E. Duluth-Smith, Lewis Spinks, William H. Stevens, Albert Strauss, Frederick Strauss, Robert A. Sullern, W. A. Taylor, Ernest H. Wands, Paul M. Warburg, William E. Webb, J. G. White, Henry T. Wills, George T. Wilson, and George W. Woodruff. Letters of appreciation were also received from the following distinguished men, representative universities, and leading organizations: President William Howard Taft; Secretary of State Philander C. Knox; Gov. Simeon E. Baldwin, of Connecticut; Gov. William Sulzer, of New York; and Admiral Francis T. Bowles, president of the Fore River Shipbuilding Co.; Brown University; Butler College; Columbia University; University of Chicago; University of Illinois; University of Pennsylvania; and Yale University; the American Chamber of Commerce of Paris; Board of Trade of Jersey City; Bridgeport Board of Trade; Buffalo Chamber of Commerce; Business Men's Club of Cincinnati, Ohio; Business Men's League of St. Louis, Missouri; Chamber of Commerce of Atlanta, Georgia; Chamber of Commerce of Boston, Massachusetts; Chamber of Commerce of Chattanooga, Tennessee; Chamber of Commerce of Cleveland, Ohio; Chamber of Commerce of Dayton, Ohio; Chamber of Commerce of Hartford, Connecticut; Chamber of Commerce of Houston, Texas; Chamber of Commerce of Pittsburgh, Pennsylvania; Chamber of Commerce of the United States; Chattanooga Manufacturers' Association; Chicago Association of Commerce; Commercial Club of Indianapolis, Indiana; Commercial Club of Providence, Rhode Island; Commercial Club of St. Louis, Missouri; Commercial League of South Bethlehem, Pennsylvania; Detroit Board of Commerce; Greater Baltimore Committee; Hartford Business Men's Association; Industrial Commission of Bethlehem, Pennsylvania; Manufacturers' Association of Bridgeport, Connecticut; Merchants' Association of Joliet, Illinois; Merchants' Exchange of St. Louis, Missouri; New Orleans Progressive Union; Pan American Union; Philadelphia Board of Trade; Rochester Chamber of Commerce; Southern Commercial Progress; Syracuse Chamber of Commerce, and Utica Chamber of Commerce..

The Director General, in extending to him felicitations, hopes that Mr. Sherrill will continue to cooperate in the future, as he has in the past, with the Pan American Union in its broad work of promoting closer relations of comity and commerce among the American nations.

THE LITERATURE OF SPANISH AMERICA

ACCORDING to Sr. Guglielmo Ferrero, the great American novel has at last appeared, though strange to say it comes not, as might be expected, from North, but from South America.

The book which has elicited such enthusiastic praise from the eminent Italian historian is entitled *Canaan*, and was written by a Brazilian diplomatist, Sr. Joseph Graça Aranha.



PHOTO BY HARRIS LOWMEYER

MRS. BLANCHE Z. BARALT, PH. D.

Noted writer, lecturer, and linguist of Cuba. Mrs. Baralt has occupied the chair of professor of languages at the University of Havana, and has collaborated with her husband in the publication of various learned works. Though a native of Chicago, she has lived in Cuba since her marriage to the eminent Luis A. Baralt, student and author.

The importance of the work lies more in its deep philosophical and sociological significance than in its fine literary form, as it deals with the interplay of Old World and of New World forces in a masterly fashion and depicts in an unique way the historical moment when America is being Europeanized and Europe Americanized.

This estimate, even though considered by some exaggerated, may be food for thought for those who have disregarded South American letters, or are astonished to hear that they amount to anything at all.

The ignorance of the general public in this respect should not surprise us, as it is scarcely better informed about the great classical literature of the Hispanic Peninsula, which has been an exhaustless fountain-head of inspiration to the writers of the world.

Spain and Portugal, all but surrounded by the sea, shut off from the rest of the continent by an inexpugnable mountain range, lived their own lives and kept aloof from foreign intercourse so long that they never acquired the knack of self-propaganda; wrapped up in their pride the *hidalgos* disdained the opinion of outsiders.

This ancient haughtiness is perhaps the remote cause of the comparative neglect to proclaim even to-day the intellectual feats performed at Madrid or Lisbon, while the slightest event happening at Paris, London, or Berlin, is flashed throughout Christendom instantly.

It is almost natural, therefore, that the literary output of Spanish America should have failed to attract the attention of the average English-speaking reader.

But a great change has come, in recent years, over the Southern Continent; the eyes of the world are fixed upon it; it is looming immense in the future; the ties which bind us to our sister republics are strengthening daily, and nothing American, in the broad sense, can remain indifferent to us.

The Western Hemisphere is, linguistically, either English or Spanish, and these two tongues, with a knowledge of their literary history, ought to be indispensable to all cultured Americans.

An opportunity should be opened for the admission of Portuguese, the language of Brazil, which can boast of a wealth of poetry superior even to its luxuriant prose,¹ but we shall limit this paper to a summary consideration of Spanish-American letters, the very earliest to flourish in the New World.

In Mexico, the most favored province of Spain's colonial empire, we find the oldest institutions of learning, together with the establishment of the first printing press in America.

In 1551 the Viceroy, Luis de Velazco, obtained for the recently inaugurated University of Mexico the same privileges and franchises enjoyed by that of Salamanca; and the Augustinian monk, Fray Alonso de Veracruz, an ardent advocate of the Aristotelian philosophy, prepared and published his treatise of dialectics in the City of Mexico in 1554, where a printing press had been set up by Juan Pablos, pupil of the famous Sevillian printer Cromberger.

As soon as the colonists began to write verse took the precedence of prose. The number of poets soon became considerable. Fernández Guerra tells us that in a literary tournament held in 1585 as many as



ST. JOHN JOSÉ PEDRO DE LÓPEZ

ALONSO DE VERACRUZ, A.D. 1554. (From the collection of the University of Mexico.)

¹ Cf. J. L. W. G. (1888), p. 100.
² Cf. L. G. (1888), p. 100.

Am. An. of them, p. 100.

three hundred poets entered the lists, and Mexico began to be known as the Athens of the New World.

Of these early bards, the names of Terrazas and of Valbuena have come down to us. The latter, though born in Spain, was a thoroughly American writer. His poems overflow with admiration for the marvelous beauty of the new land, and are exuberant and bountiful as the fertile landscape.

The greatest genius which Spanish-America has produced is Juan Ruiz de Alarcón. He was quite the reverse of Valbuena a hispanized American, and though born and educated in Mexico, belongs as absolutely to the literature of Spain as Seneca, Quintilian,

and Lucan belong to that of Rome, born and bred as they were in Cordova and of Spanish parentage.

Alarcón's activity was developed in Spain, when he became one of the foremost dramatists of the Golden Age, in line with Lope de Vega, Tirso de Molina, Rojas, Moreto, and Calderón. So completely did he identify himself with the country of his adoption that not a single reference is made in any of his works to the land of his birth.

True, the mediocre-level of a colonial town was insufficient for the development of so great a talent as Alarcón's; he needed to be transplanted to a more propitious soil



SR. DR. JOSÉ INGENIEROS,

Who ranks among the foremost scientific writers of contemporary Argentina.

where, indeed, his spirit blossomed and fruited magnificently.

From Spanish-American stock have sprung, in recent times, not a few writers of note, who, having attained the maturity of their powers abroad, are claimed by Europe as its very own; such are the Argentine, Ventura de la Vega; the Venezuelans Rafael María Baralt and García de Quevedo; the Cuban poetess Gertrudis Gómez de Avellaneda, who as a dramatist (a field where very few women of any nationality have achieved success) is without doubt a peer among her sex; and in our own day, the Cuban-born member of the French Academy, José María de Heredia, author of "Les Trophées," perhaps the greatest sonnetist of modern times.

Having mentioned the name of Avellaneda, we can not omit that of another woman, Sister Juana Inez de la Cruz, a glorious daughter of Mexico. She has been called the tenth muse, and her appearance on the literary firmament of the period (1651-1691) is considered by no less an authority than Menéndez y Pelayo as a wonder, living,

as she did, the secluded life of a cloistered nun. Her poems show such original talent, brilliant fantasy, impetuosity, and ardor of feeling, both in her secular and mystic compositions, that she may well be considered superior to all other poets of the time of Charles II, either in Spain or her colonies.

With the exception of Mexico, there is very little to register in the annals of Spanish American letters previous to the nineteenth century. The writings of a people struggling for the defense of their territory against the attacks of savages and pirates and for the

acquisition of material prosperity do not contain much that is artistic or remarkable. In some of the States the colonial government frankly opposed any intellectual progress. In Peru, for instance, a royal decree, promulgated in 1543 and often renewed in the course of its long colonial rule, prohibited "the importation into America of novels, fables, romances of chivalry, and all other but religious books."

The intellectual life of South America can be said to have awakened after the wars of independence (1810 to 1824).

During the bitter strife between despotism and revolution there was not much leisure for meditation or aesthetic composition;

ephemeral journalistic notices, political pamphlets, and works of propaganda were the chief writings of the colonists.

Art, the flower of civilization, needs the sweet waters of peace, and letters blossom when the temple of Janus is closed.

With the rising sun of independence came the dawn of literature in the new Republics. Not that the violent transition period was precisely favorable to art and letters, but the glorious generation that fought for liberty scattered broadcast a noble seed, and patriotism exalted the spirit and inflamed the heart to heroic acts and words.

Bolívar the Liberator was himself an inspired orator. In Venezuela, Coto Paul, Briceño, and Muñoz Tebar were magnetic speakers.



SOR JUANA INÉS DE LA CRUZ.

"Literary glory and ornament not only of her century, but of the whole colonial period. Her talent, extended over a wide and versatile field of knowledge, and she wrote with wonderful inspiration on matters of theology, philosophy, music, numerous arts, and even politics. As a poetess, the beauty of her verses reflected the charming and delightful character of her life."

Some of the warriors like San Martín and Mitre chronicled their deeds and won a high place among historians.

Best of all, the freedom of the customs, removing the former chains that crippled commerce, permitted the unrestricted importation of all sorts and manner of books.

But a simple change of government is not sufficient to modify essentially the life of a nation. Educated in the mold and tradition of Spain, the emancipated colonies still clung to the ideals of their old metropolis, and Spanish-American letters followed all the vicissitudes of those of Spain, passing through neo-classicism and romanticism to modern realism. The classics of the Golden Age were, however, their revered standards and formed some of the greatest New World poets, such as Bello, Olmedo, and Heredia.

Wonderful as the models are, and unrivaled though they be to develop a trustworthy taste and faultless style, they are too set and antiquated a vehicle for modern thought.

Every epoch must speak its own language, which should follow the evolution of the ideas it strives to convey.

There is a certain incongruity in Lafayette, dazzled with the light of New World democracy, speaking of liberty on his return to France in the ceremonious language of the court of Versailles.

It is often dangerous to imitate too closely obsolete forms, classical though they be. While trying to be a purist it is easy to fall into artificiality.

The florid, bombastic style of the subsequent Spanish romantic period was likewise ill suited for direct and concise expression. Latin American writers in an effort to find themselves forsook their old standards, turned their backs on mother-country tradition, and bag and baggage scaled the Pyrenees, giving themselves over body and soul to the worship of the French masters of poetry and prose.



FRANCISCO DE ROSAS, 1808-1868.
 A Spanish American writer who spent much of his life in France, at the Court of Spain, and became a prominent figure in that country.

In the Peninsula it is claimed that the American Republics, abandoning the narrow path, strictly guarded by the canons of the "Spanish Academy of the Language," are gradually falling away from pure Castilian: whereas the ex-colonists pretend to be more philosophical in their use of grammar, and to have a more scientific idea of the evolution of speech, a broader, more plastic instrument for expression.

French books, eagerly read, opened up new horizons to these young nations: French thought seduced the South American soul, and France, embodying all the qualities that captivate the Latin mind, appeared to her willing disciples as guide and master.

Henceforth Paris, not Madrid, became the intellectual center that nourished Spanish America, but in this new-found enthusiasm the wheat was not separated from the chaff.

True its benefits were great, inasmuch as French influence brought to the younger writers a complete mental independence from old shackles, an infusion of new life, a flexibility of expression and daintiness and precision which gave their style unprecedented elegance.

It offered them also a much broader field for speculation and a more varied choice of subjects.

Some of the effects of French influence, however, were pernicious. As it usually happens in all revolutions and conversions, their adepts go to extremes; and



EMMANUEL GUTIERREZ NALRA,

Mexican poet who is numbered among the pioneers of the new school of Spanish-American writers.

when it comes to imitation the weak points and eccentricities are the first to be copied.

The morbid wave which swept over French letters during the last quarter of the nineteenth century, known as the decadent movement, found a strong echo in the hearts of the rising generation of Spanish-American poets.

It required the genius of a Baudelaire or a Verlaine to juggle with meters and tyrannize over words as they did; to turn language topsy-turvy and throw tradition to the winds; to dig for new terms to express unheard-of feelings; walk on forbidden ground and speak of the unmentionable, and yet not cease a moment to be artistic.

The Spanish-American emulators of the decadents and symbolists were frequently immoral, at times incoherent, but the habit of delving deep to discover new shades of thought and subtle delicacies of speech nimbled their faculties and developed their technical skill.

This departure marks an epoch: it is the beginning, as Ugarte says, of "the definite disappearance of Spanish survivorship and the tangible advent of a regional literary conscience."

Throwing off the past these ardent young writers merged into a rich new field, where they sought to assert their personality.

Among the pioneers of this movement were Gutierrez Nájera, José Asunción Silva, José Martí, and Ruben Darío, all of whom, despite neurotic moods and eccentric concepts, gave wings to the tongue and prepared it for a freer flight; but a host of mediocre rhymsters, following in their wake, brought discredit on the school by using symbolism as a mask for their vanity, ignorance, and intruding personality.

From the Spanish past, rejuvenated by French methods, German science, and Yankee progressiveness, South American letters are issuing triumphant.

With a modernized and more flexible instrument of expression, a wide-awake interest in social aspirations, a strong generation is rising.

Statesmen like Nabuco and Drago, philologists and lexicographers like Caro and Rufino J. Cuervo, have compelled admiration; educators like Bunge and Varona commanded respect; but newer writers are excelling for originality of thought and beauty of style.

A son of Uruguay, José Enrique Rodó, has become a leader of vital importance, preaching in his books "Ariel" and "Motivos de Proteo" the gospel of hope, vocation, and self-confidence.

The Venezuelan, Manuel Diaz Rodriguez, with his "Camino del Progreso," is another optimistic philosopher of healthy and uplifting ideas.

Enrique Gomez Carrillo, a Guatemalan, is a finished artist, who chisels Spanish prose with terse Parisian elegance.

The Argentines, José Ingenieros and Leopoldo Lugones, are fervent apostles of the new ideals.

Spanish America is plowing rapidly to the front and there is every reason to believe that its literature will soon take a place with that of the great nations.



SR. DON MANUEL DIAZ RODRIGUEZ

Contemporary Philosopher and Writer. Venezuelan, excelling in the study of his own country.

DEVELOPING THE AMAZON VALLEY¹

THE map of Brazil can give no adequate conception of distances in that immense region known as the Amazon Valley. It is impossible to take into account the conditions governing travel there. A map shows merely dead distances.

In the modern industrial world we are accustomed to think in what may be called live distances. For instance, from New York to Chicago is about 1,000 miles, but our concept is rather of time than of space; we think in terms of hours. We know that we can get on a train in one place and that at the end of 24 hours we shall be in the other place. From New York to Southampton is about 3,000 miles, but our concept is that the traveler takes a five, or a six, or an eight day boat, quite irrespective of the distance covered.

On the Amazon the distance from Para to Manaus is something less than 900 miles, and so far the modern feeling of distance still holds, for by taking one of the ocean-going steamers the traveler feels confident of reaching his destination within five days. But on the interior rivers, such as the Madeira, the Purus, the Tapajoz or the Jurua, distance becomes of secondary importance, and the season of the year, the conditions of the current, the character of the weather, the kind of boat and cargo it carries, are all of major importance, for in covering the distance from Manaus to Porto Velho on the Madeira River, 653 miles, it may take 5 or 7 or even 17 days, according to any one of the factors just given, with an estimated proportion of good or bad luck thrown in. Hitherto it has been impossible to gauge with any degree of certainty what day the traveler would arrive at any destination after the steamer or smaller launch or canoe left the place in which the passenger had embarked. It was all guesswork. If the weather was favorable, if the currents had not changed the course, if the water was high so that banks were accessible, and if there was little local cargo and therefore no demand for frequent stops, the experienced pilot or captain would hope to arrive within 24 hours of the average time in which the voyage had in his experience been made before.

This preliminary statement and the conditions of travel indicated therein, must be borne sharply in mind in order to understand and to appreciate the changes which are proposed and which will soon be carried into effect by the new Amazon Navigation Co.

¹ By Albert Hale, of Pan American Union Staff

But perhaps it is best, for the sake of contrast, to describe an ordinary trip up or down any of the tributaries of the Amazon into the far corners of the navigable area of this immense basin. The steamer is advertised to leave port at a certain hour of the morning or evening. All is bustle and confusion. Most of the cargo is on board at the hour specified, but many things must yet be considered: supplies are still coming from shore, officials are checking up accounts and papers, and passengers of all sorts and conditions continue to crowd upon the steamer, the matter of space for accommodation being apparently of no importance at all. One, two, or three hours may be consumed in these final details, but nobody is in a hurry and nobody seems annoyed. The day has only the four grand divisions, morning, noon, evening, and night. Arrival and departure is close enough if taking place within the interval mentioned.

On deck the confusion is by no means overcome once the steamer is clear from the anchorage or the landing stage. Trunks, boxes,



READY FOR ACTION.

As the steamer starts to move, the passengers are crowded into the cabins. The cabins are spacious, airy, and have regular beds, while mosquito-proof wire netting protects the traveler from all the annoyance and danger of these pests.

bags and bedding are heaped up in the few staterooms and along the rails, while hammocks are slung from every possible pillar and beam. In fact, the first concern of the passenger, no matter in what class he travels, is to find the best location left for his hammock, because, in most of the river boats at present plying the Amazon and tributaries, the staterooms are used chiefly for the storage of personal effects, and only occasionally for such private matters as change of clothing. On the lower deck all sorts and conditions of men and animals can be met. Cattle ready for slaughter during the voyage occupy one corner; perhaps mules, destined for upcountry labor, are penned in another; chickens and such small game may be in coops against the pantry, or not unusually allowed to run free, picking up what they can in addition to the regular food offered them; these chickens being also part of the future provender or cargo destined for some farm farther along the river bank. But hammocks, hammocks. Everywhere

Hammocks so close together that to go from one end of the deck to the other is to thread a maze of legs, arms, ropes, and swinging bodies. Some of the occupants of these hammocks seem never to leave their nests, while others, more active, revolve their hammocks into a bundle during the day, leaving them stretched between the hooks on which they were first suspended.

But all is carried on with good nature and patience. Nobody is in a hurry, and the unfortunate individual who thinks he would like to arrive at his destination within reasonable closeness to the hour or day vaguely stated in the steamer's schedule soon loses this anxiety and becomes content, like the rest of his fellows, to let the time, with the river, drift by, consoling himself with the frequently asked question as to the probability of reaching a certain point by a certain estimated average.

Paciência (patience) is the third but unregistered word in the Brazilian legend *ordem e progresso*. The Brazilians themselves joke about it, assuring the stranger and traveler that until the full significance of the word is appreciated the essence of the Brazilian character can not be understood. And certainly there is no better place in all the world to learn what patience means than on an Amazon Valley steamer. If an arrival at a certain port is anticipated, it may be in the evening or the morning; if an unexpected stop takes place, those who have signaled the boat and wish to get on it for a journey up or down, as the case may be, have probably been waiting for the last 24 hours, in patience, glad of the chance to embark at any time with the promise of reaching their destination in the indefinite future.

Coffee is served at about sunrise, and everybody takes a cup or two. Then there is an interval of apparent activity while men, women, and children leisurely readjust themselves from night to day garments. A bath is a not unusual preliminary to this function, because many of the proper river steamers have shower-bath rooms, and it helps pass the time to enjoy the refreshing spray. Breakfast will be served about 10 o'clock, a pretty substantial meal, because it is a long-established custom in the Tropics to interrupt the day's labor toward noon, and the Brazilian merely readjusts this habit to suit the circumstances on the river. After breakfast hammocks again, because there is small space in which to sit or walk, and smaller inclination for doing so. Those who do not go to sleep may amuse themselves with a book, or perhaps a game of cards, if enough other passengers can be aroused to take part. In fact, among foreign travelers on these steamers card playing means generally gambling, and considerable sums of hard-earned money have been won and lost, so fascinating is any occupation that helps pass the time and distract from the monotony of the day. About 5 o'clock

dinner is served. This is another substantial meal, and breaks into the monotony as quite an exciting event. A simple cup of tea or coffee may be had along toward 8 o'clock, but gradually after that the day is ended, the hammocks occupied, and the night, with its silence and monotony, is over all.

Some river steamers run straight through the 24 hours, allowing of course for stops, which may consume an hour or more. Others, and this particularly during the dry season when the water is low and the channel not to be trusted, tie up to the bank or anchor in the stream, from shortly after sunset until sunrise the next morning. Sometimes, also, a too ambitious captain will try to run over the shallows in order to save the interval of darkness, or even the cautious captain may not have learned the shifts in the stream since he was last up or down the river; then the steamer runs aground, and may stick there, no amount of maneuvering being able to release her nose from the muddy bottom. In that case the patience of both crew and passengers is manifest to a most remarkable degree: days may pass before a change in the current frees the captive boat or before a passing steamer will come to its aid and succeed in hauling it into deep water again.

All these experiences have been inherited from the old days when rubber was high, when no competition was imagined or offered to that valuable and only product of the Amazon Valley. If rubber did not come down the rivers to-day, to-morrow or next month would do as well. If those going up the river did not arrive one week, it was only a trifling delay until the next, and anyhow there were supplies sufficient to last for a good part of the year to come. In some cases this irregularity worked hardships, because, when supplies were exhausted, when rubber gatherers were ready to enter the forest for their weeks of toil, a delay in obtaining the necessary supplies meant a short season and therefore reduced crop to send down river when the high water began. The picturesque side of river navigation was a delight to those who had no dread of any competition from elsewhere, and the indolence of it appealed to those who knew what dreadful exposures awaited them as soon as rubber gathering was once underway. This river commerce bore a faint resemblance to old times on the Mississippi, when cotton was king in the Mississippi Valley, and when the times of harvest marked the rounding of the year. No comparison should be drawn, however, between the character of this commerce and that on the Mississippi, for in the latter there was a height of luxury and civilization which made it an era of comfort and display, while on the Amazon rivers everything remained primitive, semi-savage, and undeveloped. In the United States the old time planters had their river palaces in which they enjoyed life to the full with all that money could buy, and no traffic of any importance whatever was worth while on the minor streams flowing into the main channel.

In the Amazon Valley, on the contrary, almost all traffic developed along the lesser rivers, the Amazon carrying the heavy cargoes destined for consuming markets abroad, while the seringueiros, those in whose hands the commercial handling of the rubber business was centered, preferred to spend their money in the cities where the buying and selling took place. An entire book might be written of this fascinating story of the rubber transportation, with its picturesque and its miserable sides, although only a few paragraphs in travel sketches about the Amazon country give it the detailed consideration it deserves; but its end is approaching, and, with the great study given to the problem of economic rubber gathering in the heart of South



THE BOWS OF RIVER STEAMBOATS.

The hulls of these steamboats are of steel; they are flat bottom and very strong, but every inch of space is utilized. The draft is only 30 inches for those of 130 tons capacity, so that even in the driest season navigation continues uninterrupted.

America, a few years from now the old, happy-go-lucky interior navigation will have disappeared.

Because of this extravagant way of doing things, this most uneconomic way of bringing rubber to market and the irregular, unsystematic means of transport, much of the cost of the rubber, between the gathering of the latex and its final delivery to the manufacturer abroad, was consumed. Therefore the profits on the crop, enormous so long as Amazon rubber controlled the price throughout the world, had to reckon with this wasteful habit of transportation.

Leaving out of consideration the freight charges on rubber coming down river and on supplies going up river, which made little difference

in cost whether the trip took three days or three weeks, two great factors are exposed in studying the evils of this interior navigation. One was the unnecessarily high estimate of carrying passengers, for the passage once paid, whether of first or second class accommodation, food must be furnished every day until the destination was reached. For instance, a first-class ticket from Manaus to Porto Velho, the northern terminus of the Madeira-Mamore Railway, costs about 558000 (55 milreis, or say \$18); the trip can be made in 5 days of favorable weather, but has been known to take 15, and the passengers' subsistence increases enormously as the time passes. The other was the irregularity of the delivery of supplies to up-river stations, and the accompanying excessive profit which the dealer made or hoped to make from these supplies. During high water, when steamers reached with little trouble the distant stations up river, supplies were plentiful, but when the period of low water (from May to toward November) commenced, supplies were scarce for months or sometimes entirely cut off, and dealers raised the prices accordingly. For it must be remembered that the whole region has been and is even yet a one-crop region. Rubber has completely monopolized the attention and the energy of the people, so that to the gathering of rubber has been devoted all their energy, and whatever time and labor could not be given to the rubber crop was dissipated.

It is very erroneous, however, in perceiving the fact that the Amazon Valley has been a one-crop region, to conclude that the soil and the climate are suitable just for rubber and nothing but rubber. The truth is that practically all of the necessities of life can be grown at a reasonable cost over most of the territory contiguous to or even within the rubber area. Certainly the cost of living can be materially lowered by deliberate recognition of this favorable condition, and recent experiments, conducted on a simple commercial basis as well as with a more theoretic regard for future possibilities, have proved a warrant for this statement.

Small farms on which are cultivated a variety of vegetables and fruits are now to be seen along the Amazon and the Madeira Rivers. On smaller and tributary streams other patches of land are being utilized for similar crops, and away from the beds of the river, in the terra firme,¹ as it is called, cattle can be raised with even less expense than they can be on the clearings necessary for their ranging close to the rivers themselves.

¹ The water mark of the wet season—November to May. In the dense forest close to the rivers the jungle is extreme, the thicket is almost impassable, and a clearing can be maintained only with difficulty. In the terra firme, on the other hand, although the forest is as extensive, the jungle, the undergrowth, is thin or altogether absent, so that passage between the trees offers small difficulty, while natural clearings are not unfrequently met in which cattle can range in health. Farther toward the south and west, in the Brazilian State of Matto Grosso and in Bolivia, the forest is thinner or has disappeared, so that millions of acres of agricultural and pastoral country are commercially accessible, now that the Madeira-Mamore

Diversified farming, therefore, is a reasonable outlook for many sections of the Amazon Valley, and when food supplies can be furnished from an area relatively close to the area of consumption the one crop incubus will be removed.

That the rubber industry in the Amazon Valley has reached a critical period can not be doubted by anyone who knows Brazil and is familiar with the development of the cultivation of rubber in other parts of the world. In spite of the emphasis that must be given to the statement that the Amazon Valley is the natural habitat of certain great rubber-producing trees, the fact is clear to an unprejudiced observer that the price of gathering and marketing Amazon rubber must be materially reduced.

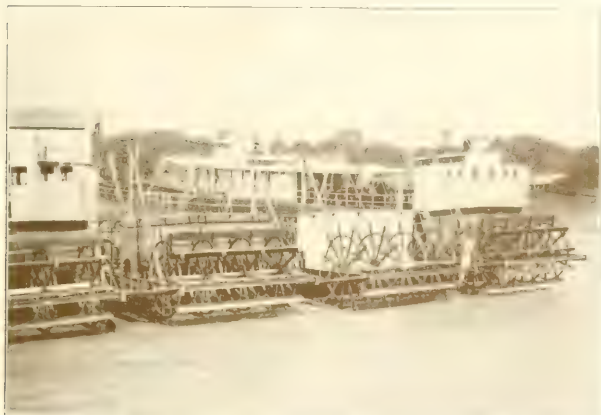
Now, the four great factors in the price of rubber in Brazil are: (1) The cost of labor; (2) the means whereby the latex (juice of the tree) is extracted and prepared; (3) the maintenance of an adequate and inexpensive supply of food and material for both living and work; and (4) the economic transportation of the rubber crop to a consuming market. The solutions of the first two factors are receiving the careful study of economists and business men in Brazil and wherever the prosperity of Brazil is held to be of vital necessity to the prosperity of the whole world. The attempt to solve the last two factors is the principle underlying the organization of the new navigation company which is about to enter upon its career of usefulness in the Amazon Valley. This company has the official title of *Companhia Navegação do Amazonas*.

The Amazon Navigation Co. operates under a Federal charter. The subvention routes embraced by its activity are 15 in number, and an annual distance of 235,552 miles must be covered. The rivers on which its steamers are to ply are, besides the Amazon, as follows: The Tapajos, the Javory, the Madeira, the Perus, the Alto Perus, the Jurua, the Rio Negro, the Solomoes (or upper Amazon), the Mamore, the Beni, the Madre de Dios, the Guapure, and the Abuna; together with two so-called outside routes, one along the coast southward from Para as far as Salinas, the present pilot station for Para; the other northward, beyond the island of Tapajos across the main mouth of the Amazon and thus along the coast to the River Oyapock, which is the dividing line between Brazil and French Guiana. Thus it will be seen that, in addition to Brazilian Amazonas, parts of Bolivia, Peru, and French Guiana are to be tapped by these steamers.

This is by no means all virgin territory, for many of these rivers have been used for navigation of one kind or another since rubber was first transported to Para. For instance, there is a monthly Bolivian Government steamer on the Beni River to the head of navigation, carrying the mails for Riveralta, the chief town of the district; it covers 250 to 300 miles, in from 25 to 30 days, and connects with

other boats on still smaller rivers, but during August, September, and October its schedule may be abandoned on account of low water. Launches of only 3 to 4 feet are employed to supplement this limited navigation. On the Mamore River, into Matto Grosso, as well as on the Orton in Bolivia and many others in Brazil and into Peru, steamers and launches are in service, but from June or July to November, shallow water may interrupt their traffic or entirely interfere with it.

Only a careful study of the map of the Amazon will convey a rudimentary idea of the immensity of the area involved, and only a serious acceptance of the preliminary part of this article will convince the student of the radical change which is contemplated by the sys-



A STEAMSHIP FLEET ON THE AMAZON.

The power vessel of the Amazon Navigation Co. is the largest, and will be used to transport the water-tops of Val-de-Caples, near Paris. They are powerful engines, and promise to add greatly to the economic welfare of the great Amazon Valley.

tematization of Amazon navigation as outlined by the charter of the Amazon Navigation Co. For the transportation of the Amazon Valley as a whole, is contemplated. Not one river, or the commerce of a single area, is under consideration, but its ambitious plan is the uniform and harmonious organization of the commerce of 40,000 miles of navigable waterways.

The fleet will consist of about 100 craft in all. Some of these have been taken over from the old English Amazon Navigation Co., that organization having had 32 steamers in service when it relinquished its charter. Of the newer boats, 12 are of Dutch design, but modified in some details to conform to the ideas of experienced rivermen who know what local conditions are to be met. The

others are on the lines of steamboats used in the United States, where navigation on inland rivers, in many ways not unlike the tributaries of the Amazon, has developed an economic commerce unequalled in any other part of the world.

One essential feature warrants notice. The Dutch steamers are of twin screw, whereas most of the English steamers are single screw, although a few of later pattern have stern wheels. All the steamers of American build are stern-wheelers, such as have been so familiar to travelers on the Mississippi for two or more generations past.

Several advantages are claimed for this class of steamboat, and the people of the Amazon are eagerly looking for a practical demonstration of what can be accomplished. They can haul more freight, for, in addition to their carrying capacity, they may be used for towing. They can push barges ahead, a facility hitherto little considered on these tropical waters. They can turn quicker. They can go backward with only slight loss of their horsepower. They are at present adjusted for burning coal, but when a saving in the cost of the fuel can be effected their engines can be made to burn wood, so much of which is obtainable along the river banks, and ultimately oil can be burned, and this may be the fuel in future, whenever the supply of oil can be obtained in dependable quantity. They are modern, clean, and commodious, the accommodations for all classes of passengers being above that furnished by the older type of boat, although the traditions of the river have not been heedlessly violated, so that the arrangement of berths, bath and toilet rooms, hammock space, and dining tables is not altogether unfamiliar to those who know their Amazon or other rivers well, but who have no acquaintance with foreign travel. And above all, these steamers can navigate from one year's end to the other, because they are of such light draft that even in the driest season they can escape the dangers of the upriver shallows.

This scheme of uninterrupted navigation is intended to aid most thoroughly in reducing high cost of living throughout the regions reached by these steamers, or, in other words, throughout the area where Amazon rubber is gathered. Two subdivisions of the company's schedule are to be operated. The first is confined to the main stream of the Amazon, the steamers being larger and faster, although they will be able to touch at the small landing places, and thus to collect rubber or to deliver supplies wherever the chance is offered. The second will ply on the upper rivers (*rios altos*), the size of the boat being selected according to the depth of the stream and the character of the banks alongside it. But all steamboats, whether on the larger or on the smaller streams, are to run on a regular timetable, as it may be called, and service will be performed all the year round.

As yet no precise estimate can be made concerning the lessened expense which this change in navigation implies. It can not be doubted, however, that a large percentage of the former waste in transportation must be eliminated. The fact that rubber can be brought down to market regularly and within a certain time means that the market will not be glutted at one season of the year and unable to meet calls upon it at another. The energy of the rubber gatherers and rubber dealers must thereby be stimulated to the introduction of a healthier system of supplying that market, for it stands to reason that where an opportunity is offered the average business man will take advantage of it. The success of the Amazon Navigation Co. means in all probability the removal of one of the economic impediments to the restoration of the Amazon rubber industry.

The return or rather the upgoing freight to be carried by the company must consist of supplies to the *seringueiros*. This is the name commonly given to the upriver owner of rubber lands, or who at least acts as the middleman between the actual gatherers from the tree (*trabalhadores*) and the dealer in rubber for export in cities like Para and Manaus (*caviareiros*). The *seringueiro* outfits the *trabalhador* with implements, food, clothing, and other supplies. Exorbitant prices are charged for the outfit, because, in the first place, everything must come from a great distance at a high cost, and, in the second place, owing to the system of employing labor, the risk run by advancing supplies must find some compensation in such a high charge. This unreasonable cost of supplies, the result of years of careless disregard of all sides of the economic problem, has led to abuses somewhat similar to the ancient peonage of Mexico and other parts of Latin America. It is due in part also to the complete dependence upon rubber as the wealth of the Amazon, which fostered the feeling that nothing else was worth producing within the charmed rubber area. The regular and continuous navigation of the interior rivers by the Amazon Co. is a long step toward a material reduction of this factor in the initial cost of rubber, but it is only one of the means proposed to aid the Amazonian in realizing that he has another source of natural wealth within his grip.

For its own commercial prosperity any transportation company must see to it that freight is carried at a profit both ways along its line. On the Amazon earnest effort is to be made to encourage local farming, whether it be the raising of the simplest crops like corn, mandioca, and bananas or a more diversified market gardening to include beans, potatoes, other vegetables, and fruits. This is part of the scheme of the *Companhia Navegação do Amazonas*, but a further development of this idea can be found in the Amazon Land & Colonization Co., which deserves a chapter by itself.

UNIVERSITY EDUCATION IN MEXICO¹

THE University of Mexico is one of the oldest on the Western Continent. The date usually assigned as its beginning is 1553, and it is antedated only by the University of San Marcos, at Lima. A difference of a few years is after all but a trifling matter, and even the authoritative date of establishment does not always indicate the beginning of university studies. In some instances these were inaugurated before the university charter was secured, while in other cases the formal organization preceded the actual beginnings of university instruction.

The University of Mexico had a continuous and honorable history during the entire colonial period. With the political independence of the country came a change in its status. As in France at the time of the revolution the university with its close organization, its academic privileges, and its medieval traditions seemed to partake too strongly of the old aristocratic and monarchic régime, and it was resolved into separate and independent faculties of law, medicine, etc. Higher education in Mexico continued under this organization until 1910, the centennial year of the first insurrectory movement. Among the elaborate festivities that marked the centennial celebration was the inauguration of the new Universidad Nacional de Mexico. As the independent faculties had been formed by breaking up the old colonial university, the new institution was formed by the amalgamation of existing schools. The university included at its reorganization five colleges—law, medicine, engineering, fine arts, and the graduate school (*altos estudios*). The National Preparatory School is also an integral part of the university system, although it is simply a secondary school, similar in rank to many others throughout the Republic. It differs, however, from the ordinary high school in that its mission is to prepare specifically for one or another of the university careers. The faculty of theology that formed a part, and a very considerable part, of the colonial university is not found in the new institution. Not that the church is less scholarly or efficient, but the separation of church and state forbids the introduction of a college of theology into a national university. The College of Medicine included originally the departments of pharmacy and dentistry, but in December, 1911, the latter was detached from the faculty of medicine and erected into a separate school. Its requirements for

¹ By Edgar Ewing Brandon.



THE NATIONAL UNIVERSITY OF MEXICO AT MEXICO CITY

The building of the National University of Mexico, which was dedicated to the study of the fine arts, and the graduate school, and the dedication of its new building, were special features of the centennial celebration in 1910.



NORTH FAÇADE OF THE NATIONAL PREPARATORY SCHOOL, MEXICO CITY.

Admission to most of the colleges of the university is based on the completion of secondary studies either here or at other secondary schools of equal rank

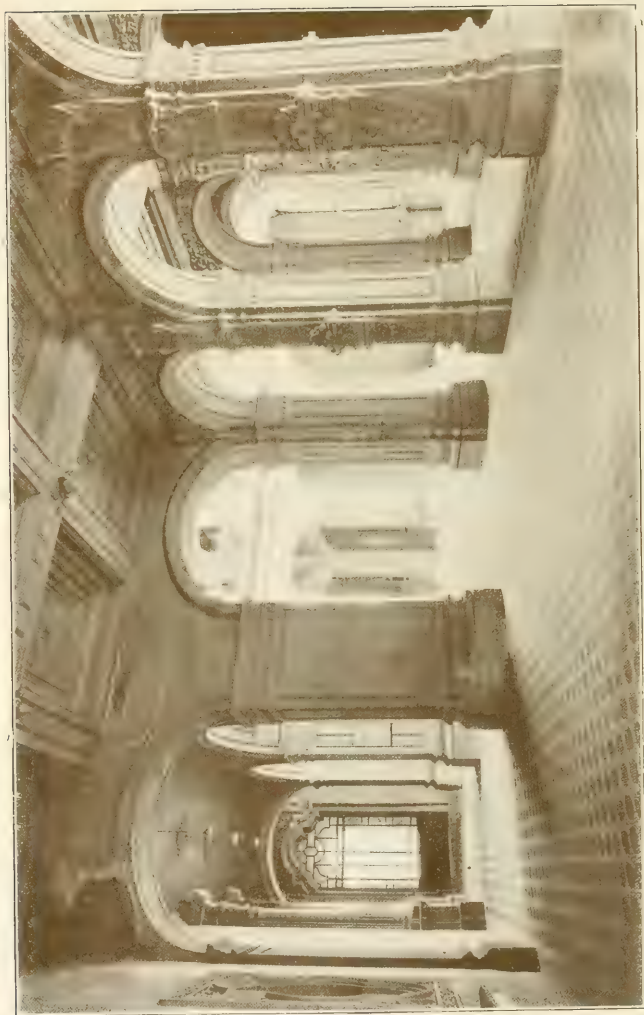
admission are not as high as those demanded by the colleges of medicine, law, and engineering.

Admission to most of the colleges of the university is based on the completion of secondary studies either in the National Preparatory School or another secondary school of equal rank. The duration of studies varies in the different colleges. In medicine it is six years, in law five years, in engineering five, four, and three years, according to the particular career that the student follows.

Formerly the scholastic year began the 1st of April, or rather after Easter, and closed the end of January. A new regulation makes the academic year run from February 1 to the end of November. Hereafter December and January will comprise the annual vacation period. In order to effect the change one term was materially shortened. Beginning with 1913 the new regulation will be in effect in all departments of the university.

The facultad de altos estudios has already been referred to as the "graduate school." It could more properly be designated the college of nonprofessional and special studies, and is something unique in Latin-American university life. Everywhere in Latin America the professional school dominates. The universities are little else than groups of professional colleges. Pure science, literature, historical, and economic studies are accorded small consideration in the university curriculum. These subjects are confined to the secondary schools; the university is almost everywhere given over exclusively to professional studies. It is to the credit of the new National University of Mexico that alongside its schools of law, medicine, and engineering it created another devoted to disinterested learning and to research. The facultad de altos estudios is not, however, properly speaking a college. It has no curriculum. It may and does offer courses of instruction, but it may engage a professor for research only. Its work may be done in Mexico City or in any part of the Republic or even in foreign countries. As a sample of the teaching courses offered by the college the announcement for 1912 includes lectures on bionometry, anthropometry, linguistic families of the North American Indians, and botany. Certain courses given by this faculty partake of the nature of university extension work.

The organization and administration of the university differs in one point from the customary type. This difference consists in the presence of student members in the university council. The faculty of each college is represented in the council by two professors chosen by their colleagues. Likewise the students of each college choose one of their number from the highest class who also sits in the council and assumes his part in its deliberations on the same terms as other members. Four professors at large are appointed to the council by the minister of public instruction. The rector is named by the



MAIN CORRIDOR OF THE NATIONAL PREPARATORY SCHOOL, MEXICO CITY.

President of the Republic for a term of three years and may be reappointed. He can not be a director or professor in any college of the university. This is a wise provision. It makes the rector the chief of the entire institution and frees him from unreasonable sympathy with any one department. He can see things in the large, and if he confines his activities to this one work, as is the evident intention of the charter, he can become a real leader in educational thought in the country.

The university council distributes the revenue among the different departments, fixes the curricula, creates or abolishes chairs, advises the rector in regard to the personnel of the various faculties, administers university extension courses, and takes whatever measures are necessary to promote the moral, intellectual, and material welfare of the institution as a whole.

The budget of the university for the fiscal year 1912-13 reaches the sum of \$1,236,473 (national currency) of which \$111,000 is devoted to the School of Engineering besides \$20,600 for the maintenance of the practical School of Mines, at Pachuca, which is an adjunct of the Engineering College of the university; \$167,000 goes to the College of Medicine, \$40,000 to the Dental College, and \$30,000 to the Graduate School. The College of Law receives only \$44,000. Mexico is one of the few universities of Latin America in which the law school does not predominate. This is evidenced not only in the budget but also in the enrollment. The medical school contains more than twice as many students as the college of law, and the engineering school also numbers more than law.

The largest collection of the university in point of numbers is the College of Fine Arts, which in 1910-11 enrolled 1,181 students. This large number is accounted for by the fact that the school contains three distinct departments: Painting, sculpture, and architecture. Only the last named is of university rank, the other two admit pupils who may have but an elementary education and their curricula are purely artistic in character. The department of architecture is, however, of full university rank, requires a secondary education for admission and offers a scientific and practical course of study. During the past year it has been installed in other and more appropriate quarters and has been furnished with much new and modern equipment.

The work of the university is not confined to the colleges enumerated above. As a corollary to the faculty of medicine which is a teaching body there exist the Instituto Patológico, the Instituto Médico, and the Instituto Bacteriológico, which devote themselves to research and general scientific study in the realms of medicine and hygiene. Each has its director, a staff of experimenters, and laboratories. The first receives an appropriation of \$10,000 and the other



LECTURE HALL IN THE SCHOOL OF MINES AT MEXICO CITY



MILITARY INDUSTRIAL SCHOOL AT SAN LUIS POTOSI, STATE OF SAN LUIS
POTOSI MEXICO.



MILL VALLEY SCHOOL AT HARTLEY, CALIFORNIA

\$60,000 (national currency). During the past year the Instituto Patológico has conducted research in typhus, leprosy, and cancer.

Other adjuncts of the university are the two museums of natural history, and of Mexican archaeology, ethnology, and history. These institutions are not simply museums, they are teaching bodies as well. They maintain a staff of professors and conduct classes in their respective specialties. The latter, for example, during the last scholastic year maintained classes in Mexican history, archaeology, ethnology, and in the Aztec language. The class in history is at present compiling under the direction of the professor an historical bibliography of Mexico. Each museum publishes a review, as do also some faculties of the universities.



THE UNIVERSITY OF GUADALAJARA, STATE OF JALISCO, MEXICO.

Higher education in Mexico is not all centered in the national capital. There are schools of law in almost all the State capitals; schools of medicine at Guadalajara, Merida, San Luis Potosi, Oaxaca and Puebla; engineering schools, either civil, mining, mechanical, electrical or agricultural, at Chihuahua, Guanajuato, Pachuca, Queretaro, San Luis Potosi, Culiacam, Puebla and San Juan Bautista. The only departments of university instruction that are not duplicated in one or more of the provincial centers are the faculty of fine arts and the graduate school, and the latter, as stated above, is in no sense a local institution. Its activities are intended to be nation wide and its influence in favor of higher learning should permeate the entire Republic.

NEW YEAR'S RECEPTION BY SECRETARY KNOX

IN accordance with a time-honored custom, the Secretary of State of the United States and Mrs. Knox were hosts at a brilliant reception given in the form of a breakfast on New Year's morning, January 1, 1913, to the diplomatic corps resident in Washington. Officials of the Department of State, members of the Committees on Foreign Affairs in both the Senate and House, with the ladies accompanying them, assisted the Secretary and Mrs. Knox. The recollection of the delightful and charming occasion of a year ago when the official hosts departed from their usual custom of receiving at their own home and tendered the function in the spacious Hall of the Americas in the Pan American Union Building doubtless prompted the choice of this place again. The stairways and the grand foyer were artistically decorated, while heavy banks of palms, a profusion of poinsettias, and a number of other floral pieces lent an harmonious color to the scene. The tropical effect presented by these decorations and the inviting warmth of the patio with its dashing verdure were in striking contrast to the gray gloomy skies of the winter day without. The Secretary and Mrs. Knox, at the head of the receiving line, welcomed the guests at the foot of the south stairway. Passing them the diplomats and ladies ascended the broad stair hall into the foyer and then to the magnificent ball-room, where the invited guests had opportunity to extend the greetings of the season to each other. The scene in the building was particularly pleasing, and the striking brilliancy of the uniforms worn by the diplomatic corps was most effective as they appeared here and there in the throng. Music was furnished by a band which played during the reception. The breakfast was served in the large reading room looking out upon the placid pool and the scenic landscape effect of the gardens in the rear of the building. The idea of holding such functions in the Pan American Union Building is a most felicitous one, for the atmosphere of peace and comity which so strongly characterizes the building and its surroundings seems to transfuse its noble spirit into the multitudes which gather under the roof of this building.



NEW THEATER AT PANAMA

PANAMA is experiencing to-day an era of progress and development unprecedented in the history of this romantic Republic. The advancement is general, and appears in nearly every branch of activity, social, commercial, and intellectual. One of the latest indications of this splendid forward movement is an artistic theater which has but recently been completed and opened in the city of Panama, the Teatro Variedades.

This large spacious building with its attractive style of architecture occupies a commanding position facing Santa Ana Plaza in the central section of the city, and marks a signal tribute to the artistic taste and sound business sagacity of its owner, a prominent Panaman, Sr. Don Tomas Arias.

The work of constructing this edifice commenced three years ago, and during this period every detail was carefully supervised by Sr. Arias personally with the cooperation of his architect. It is a three-story structure, and totally equipped has cost over \$75,000. Considerable of the material for both building and decorations was purchased from manufacturing concerns in the United States. On the ground floor of the building is a unique arrangement by which it is possible to convert the main auditorium into a dancing parlor. A roof garden large enough to accommodate over 200 people, and a promenade balcony extending along the entire upper floor of the theater building are unusual features and give the theater a hospitable and pleasing atmosphere.

The interior decorations, paintings, and scenic effects indicate careful, discriminate, and artistic selection. The windows, too, are brilliantly adorned with replicas of the world's famous masterpieces done in harmoniously blended coloring. From the center of the great dome is suspended a large vase elaborately painted. Soft, comfortable chairs, electric fans, illuminating devices, and a dozen and one other little details have all been so solicitously provided that the playhouse compares most favorably with those in other large cities. In point of construction and beauty of decoration, it is a worthy addition to the buildings of the city as well as a compliment to its owner.





THE NEW TEATRO DE VARIEDADES AT PANAMA CITY.



CURTAIN AND INTERIOR OF THE NEW TEATRO DE VARIEDADES.

NEW HAVANA TERMINAL STATION

WITH ceremonies appropriate to an occasion of such importance, the new terminal station of the United Railways of Havana was formally inaugurated on the afternoon of November 30, 1912, and on the following day the building and its entire equipment were thrown open to public use. The erection and dedication of this splendidly equipped depot marks a new and important era in the railroad history of Cuba. It means that travel and transportation, which have been enjoying a steady growth, will now have adequate facilities for their expansion.

The building is of the Spanish Renaissance style of architecture and stands on the old arsenal grounds. Concrete, steel, and Tennessee marble are the materials of which it is built, and the structure presents a solid and substantial appearance. Large waiting rooms, both inside and outside the station, furnish abundant room for the thousands of passengers who use this building daily, and the ticket offices of the various railroads which center there are arranged in such a manner as to render confusion impossible.

The first train to leave the new depot pulled out on the night of November 30 at 10 o'clock amidst the cheers of hundreds of officials and spectators who had gathered to witness the practical inauguration of the equipment. The ceremonial exercises, however, occurred on the afternoon of the 30th. A special train left the old Villanueva station at 2.40 p. m. for the new terminal, carrying the officials of the road and a number of invited guests. It was the last passenger train to ever leave the historic old depot. As the train drew into the new station it was received with enthusiastic cheers by the assembled crowd, while a brass band added to the spirit with its martial strains. Then Bishop Estrada, surrounded by Dr. Julio de Cardenas, the mayor of Havana, Mr. Robert Orr, the general manager of the United Railways & Havana Terminal Co., and other high officials of the State and company, formally gave his blessing to the new station. The ceremonies closed with a speech by Sr. Don Antonio S. de Bustamante, general counsel for the road, who traced the progress of the United Railways of Havana and the importance which the new improvement meant not only to the capital but to the entire Republic of Cuba.

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In his review the speaker pointed out some striking facts and figures. He showed that during the past year the three allied lines had carried more than 11,000,000 passengers, 8,000,000 tons of merchandise, and employed nearly 7,000 people, mostly natives of Cuba, who earned close to \$3,000,000 in salaries.

The terminus contains four double train sheds for passenger trains, the freight yards being located to the east of the station and occupying a low planice about 20 feet below the floor of the passenger station. Passenger trains reach the new station over a viaduct stretching for a distance of about a kilometer, which starts at the end of the arsenal yard, to the Agua Dulce bridge, where they again descend to the level of the ground. The freight yards, which have now been in operation since July 1, occupy a space of about 140,000 square meters, there being two large steel built warehouses for the use of incoming and outgoing merchandise, and, like the passenger sheds, are equipped for both steam and electric tractions. Considerable space was also allowed for future development.

The new station is used by three lines now fused under the United Railways of Havana, the United Railways, the Havana Central Railroad, and the Western Railroad of Havana, and also by the Cuba company, which has a direct daily service to Santiago de Cuba. The managers of the company are to be congratulated upon this splendid addition to their material equipment and for their efforts to make this new building thoroughly modern and comfortable for their employees and the public alike.



BUREAU OF EXPOSITIONS AT MONTEVIDEO, URU- GUAY " " " " "

EVER alert and active in developing her wonderful natural resources and in making known the great possibilities which exist in that country for the immigrant as well as for the man seeking new fields for investing capital, the Republic of Uruguay is steadily increasing the facilities for spreading practical information concerning the country and its opportunities. One of



DEVELOPING ROOM AND MOVING PICTURE EQUIPMENT OF THE BUREAU OF EXPOSITIONS AT MONTEVIDEO

the most recent methods adopted by the official Government in this direction is the Bureau of Expositions at Montevideo. This department was created to disseminate broadcast useful and practical data about the conditions of the country, information concerning immigration and immigration laws, and to arrange for the exposition of native products in other lands. The national propaganda is thus



HEADQUARTERS OF THE BUREAU OF EXPOSITIONS, AT MONTEVIDEO, URUGUAY

definitely concentrated in one well-organized department of the Government, and from it will emanate the projects and details of foreign exhibits, expositions, and publicity work.

According to the plans of the Government, no means or efforts will be spared to make this organ one of the most efficient agencies in the world for bringing about a general appreciation of the riches and productive potentialities of the Republic. It will arrange for the various exhibits which the Government sanctions at international expositions and execute any publicity matters which may arise from time to time. In addition to this phase of its activity, it will also publish, at frequent intervals, special descriptive pamphlets, bulletins, and other reports dealing with opportunities which the country affords to settlers and to the business world. To aid in this publicity movement, special photographs will be taken and widely distributed by the photographic division of the Bureau. This particular branch, moreover, as constituted here, represents a distinct advance in the idea of advertising. A large studio with an up-to-date photographic equipment has been installed in connection with the work. It is not only planned to have photographs, but a moving picture device is also a part of the plant. In this way commercial institutions abroad, leading newspapers and magazines, and other recognized commercial agencies will receive official photographs of views of the country, its industries, institutions, and other attractive features, while the cinematograph will be utilized for public lectures at home and at the various expositions in which Uruguay participates. Another interesting part of the work will be to keep in touch with domestic merchants, manufacturers, exporters, and importers who may wish to display their products at the different foreign exhibits.

The Bureau of Expositions is at present housed in a large building at 1467 Calle Solís, at Montevideo, and at its head is the well-known engineer, Sr. Alfredo Ramos Montéiro.



PROMINENT IN PAN AMERICAN AFFAIRS

THE COUNTRIES of Pan America have experienced much sorrow in the last few months through the demise of a number of prominent men who had rendered distinguished services to their respective countries both at home and abroad. In the list of the lamented ones appear those whose activities have extended through many countries of Latin America so that the bereavement is keenly felt not alone in their native land but throughout Pan America.

The sad loss, moreover, was not confined to any one country or to any one class of men, but official, diplomatic, and literary circles alike have been deprived of able leaders. Mexico mourned the death of its one time Vice President, Sr. Ramon Corral; also of one of its noted diplomats and writers, Sr. Justo Sierra. In Colombia, Sr. Enrique Cortés, diplomat and financier, was called to rest. The Argentine Republic was cast into great gloom when the governor of the Province of Buenos Aires, Gen. José Inocencio Arias, passed away. The United States and also Peru sadly felt the death of Richard Renshaw Neill, who for nearly a quarter of a century was the Secretary of the United States Legation at Lima. Pan America and the world at large voiced their lamentations at the death of Albert K. Smiley, the great advocate of peace and arbitration, and founder of the now famous Lake Mohonk International Arbitration Conferences.

It is, however, a pleasure to record at the same time the activities of a group of Americans who are exerting their good offices for the promotion of commerce and comity between the American Republics, and thus cementing still firmer the existing ties of peace and friendship throughout Pan America. Peru contributes an active worker in Sr. Don Eugenio Larrabure y Unanue, formerly Vice President of the Republic, who has done much to promote friendly intercourse with other nations of America. In Brazil, Dr. Fernando Mendes de Almeida, through the medium of two representative periodicals of which he is editor in chief, is doing a splendid work in this direction. Sr. Francisco Escobar, the able consul general of Colombia in New York, is serving the cause by promoting the commercial intercourse between his country and the United States; Sr. Don Garcia de Paredes, now secretary of the civil division of the supreme court of justice of Panama, while consul general in New York became generally known in Pan American circles; Sr. David Montt, of Chile, has shown himself an ardent advocate of closer relations between the

American Republics in a public address at a recent celebration. Stuart J. Fuller and Graham H. Kemper, of the United States Consular Service, detailed at Latin-American ports, are ably assisting in bringing about closer associations through a greater exchange of trade between the countries; and the appointment by Panama of Walter Scott Penfield, of Washington, District of Columbia, as counselor of the legation of Panama is another expression of the Pan American spirit.

Sincere regret of a genuine nature was everywhere voiced when the sad news of the death of SR. RAMON CORRAL, one time Vice President of Mexico, was announced on November 10, 1912. Sr. Corral had served his country for a long period of years and had shown such a devotion to duty and executive ability of so high an order that he was regarded as one of the greatest statesmen of Mexico. In his highest positions he exerted a powerful influence to develop a strong feeling of confraternity between his own country and the other nations of America. This brought his name prominently before the leaders of Pan American thought, and the loss of his energetic efforts in the promotion of commerce and comity between the American Republics will be strongly felt.



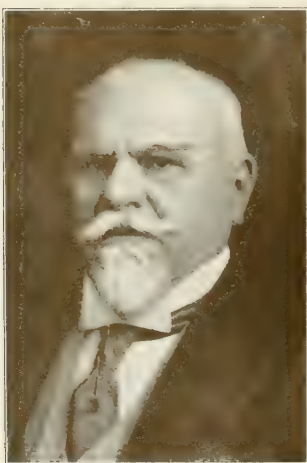
SR. DON RAMON CORRAL

Sr. CORRAL was born on January 10, 1854, on the hacienda of Las Mercedes, near the city of Alamos, where his father was manager. As a boy Don Ramon showed great tenacity, ability for hard work, and business acumen which soon brought him to the fore. He became editor and publisher of two journals, and correspondingly active in the political arena of the State of Sonora, where he was appointed general secretary to the government of that State.

Soon after Sr. Corral was elected deputy to the National Congress he made a strong impression on his colleagues by a brilliant fight in connection with an agrarian bill affecting his State. This brought him into national prominence and resulted in his election as governor

of Sonora for the period from 1887 to 1891, and reelection in 1895. Several years later he traveled in Europe, and on his return he was made governor of the Federal District, an exalted and most responsible post. His strict adherence to principle, his sincere, frank, cordial, and gentlemanly nature became so generally recognized that he was appointed minister of the interior in the cabinet of 1903. The following year witnessed his further rise in public life his election to the office of Vice President of the Republic. This last post he held until May, 1911, when he tendered his resignation.

Few men in recent years have acquired so firm a hold on the affections and admiration of their fellow countrymen as to bring



SR. DON JUSTO SIERRA

forth such eloquent tributes and fervid eulogies as has the death of the late SR. DON JUSTO SIERRA, envoy extraordinary and minister plenipotentiary of Mexico at Madrid, Spain. One of the most cultured men of America, a writer and poet of skill and beauty, a philosopher of deep intellect, a diplomat and statesman of note, his demise was, indeed, a sharp blow to the Republic of Mexico and to the world at large.

Sr. SIERRA was a man of exceptional talents and many interests. As statesman occupying the position of secretary of instruction he directed the educational forces of his country in a manner that bore excellent fruit many years after he had left that post. His administrative policies and pedagogic theories were the result of long

years of careful thought and practical investigation. Clothed in the somber toga of the judge, he was no less renowned for his lofty sense of justice and sympathetic interpretation of the rigors of the law. As a diplomat he won a high place of respect in the circles where he was accustomed to mingle.

Born in the city of Campeche January 26, 1848, he received a legal education at the College of San Ildefonso. His first public appointment was that of secretary of the supreme court of justice, which position he held from 1872 until 1881, when he resigned to enter the National Congress, of which he had been elected a member. During

his service in this body Señor Sierra acquired great distinction as an orator and man of letters. He contributed freely and frequently to various periodicals, including in his offerings poetry, fiction, historic and pedagogic treatises, etc.

Although actively engaged in the public service in one capacity or another for nearly 40 years, he nevertheless found time to devote to his literary penchant. He is the author of a number of novels, a series of delightful stories on travel, essays on sociological topics, as well as several histories of Mexico.

His works on history are regarded as authoritative.

In 1905 he was appointed minister of public instruction in the cabinet of President Diaz, and several years later was honored with the position of minister to Spain, which post he occupied up to the time of his demise.

The Pan American Union records with keen sorrow the demise of a former member of its Governing Board, Señor Don ENRIQUE CORTÉS, ex-minister of Colombia, on the 11th of December, 1912. Señor Cortés represented both the highest culture and the best business quality of his country, and acquired great prominence not only in Bogota but also in London as a successful financier.

He was the founder and for many years director of a large banking organization in London which conducted an extensive international business. Señor Cortés is well remembered here for the excellent impression he made during his residence in 1907 as minister to the United States. He was appointed for the special purpose of conducting negotiations for a new treaty, and his wide and practical experience made him a conspicuous figure in diplomatic and official circles. His death is deeply felt by his many friends and former associates.

When death carried away the late Gen. JOSÉ INOCENCIO ARIAS, governor of the Province of Buenos Aires, on September 11, 1912, there was deep mourning throughout the entire Republic of Argentina.

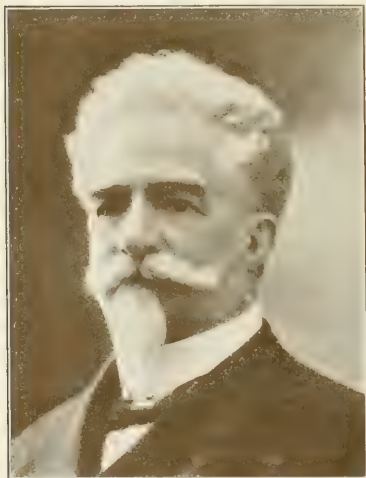


SR. DON ENRIQUE CORTÉS.

Gov. Arias was one of those noble patriots whose every act was marked by some evidence of altruism, by some expression of concern for the public weal. Although his career in the earlier years of his life was mainly military, it was his noteworthy achievements and brilliancy in this field that placed him in the foreranks of leaders and later won for him positions of trust in the public service of his country.

Perhaps there is no better characterization of the loss and sorrow which his demise has caused than the statement in one of the leading periodicals of Buenos Aires, which said:

With the death of Gen. Arias the country lost a true son, the Province a sincere governor and a courageous defender of its laws, society a most distinguished member and example of modesty, his friends a generous brother and a perfect gentleman.



GEN. JOSÉ INOCENCIO ARIAS

Gen. Arias was born in Buenos Aires on December 28, 1846. After a brilliant course of studies in Montevideo he returned to Argentina and joined the Legion de Voluntarios, where he soon rose in rank by intelligence and bravery. His advancement in the army was rapid, and at the age of 28 he was promoted to the rank of colonel on the field of La Verde, where he had distinguished himself in action.

Withdrawing from military life, he was chosen senator from the Province of Buenos Aires in 1880. In 1888 he was honored with the election as national

deputy. About the same time he was made chairman of the national committee which proclaimed the candidacy of Dr. Roque Saenz Peña for the Presidency of the Republic. His next rise in public life came in his election to the office of vice governor of the Province of Buenos Aires, followed several years later by his election to the position of governor of the Province. Contemporaneous with his election to this office the military rank of general was bestowed upon him.

In respect to the memory of the late governor the national flag was flown at half-mast for 10 days on all the state buildings in the city of La Plata while the body lay in state in the Government palace at that city.

On October 5, 1912, RICHARD RENSHAW NEILL, an interesting figure in the diplomatic history of the United States, died at his home in Wayne, Pennsylvania. For nearly a quarter of a century Mr. Neill had served in the diplomatic corps of his country and had the unique distinction of being accredited to one post for a greater length of time than perhaps any other diplomat in the service. Mr. Neill was the secretary of the United States legation at Lima, Peru, for 25 years, and during this time he frequently acted as chargé d'affaires of the United States in the absence of the minister.

Mr. Neill was born in Philadelphia October 20, 1845, and received a thorough academic education. His first experience in Latin America came in 1868, when, as a young naval lieutenant, he landed in the midst of the tumult and turmoil of the early struggles of South America to protect the United States legation and to assist in the reestablishment of peace and order. He so ingratiated himself with the people of those countries that he was regarded as their friend, and when the announcement came years later that Mr. Neill had been appointed to a diplomatic post in Peru his coming was awaited with much pleasure and satisfaction.



RICHARD RENSHAW NEILL

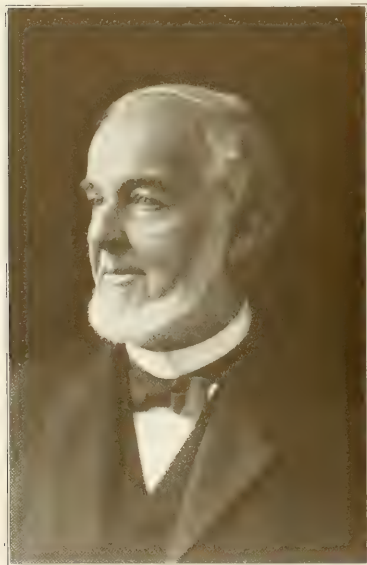
In 1909, when Mr. Neill retired from the service, he was tendered a brilliant farewell banquet, at which many of the most prominent men in Lima participated, besides the diplomatic representatives of all the great powers of Europe and South America. It was a fitting honor to a man who had spent 25 years of his life in one country and had formed imperishable ties of loyal friendships. When the parting came it was as if a native son of Peru was leaving his own country perhaps never to return again. His death, therefore, has caused much sorrow in the United States, his native country, and Peru, where he had lived for so many years; and in the other South American Republics, where his name was familiar by reason of his broad social intercourse and his wide circle of friends.

ALBERT K. SMILEY, known to all advocates of world peace and international arbitration, died at his winter home in southern California on December 1, 1912, in the eighty-fifth year of his age. His death brings to a close a life of rare usefulness, characterized by unique achievements. His death is particularly mourned by the countries of Latin America, for whom Mr. Smiley always had a fond admiration. Many, indeed, are the prominent statesmen and diplomats of Pan America who have participated in the deliberations of

the famous Lake Mohonk International Arbitration Conferences and have enjoyed his genial hospitality.

The origin and development of these notable peace gatherings form an interesting chapter in his life. The great influence which they exert in promoting the cause of peace and arbitration in all lands is a real reflection of the character of this man, who combined in a remarkable degree the spirit of peace and good will and the spirit of devotion to high ideals with great catholicity.

Born in Vassalboro, Maine, March 17, 1828, Mr. Smiley attended the public schools and later Haverford College, Pennsylvania, from which he graduated in 1849. Since then he was the recipient of several honorary degrees, includ-



ALBERT K. SMILEY

ing that of LL. D. from his own alma mater. At first Mr. Smiley taught school and later established several academies of his own which, under his strong and manly influence, grew to national prominence.

In 1869 he acquired the Lake Mohonk property, where, each spring since 1894, he invited several hundred prominent persons as his personal guests to discuss international peace and arbitration. While a sturdy advocate of peace, he nevertheless possessed such a breadth of vision that to these meetings he would invite representatives of both the Army and the Navy to present their views, always

as advocates of peace, if possible. So important have these conferences grown that to-day they are looked upon as one of the most powerful agents in the world for molding a sentiment in favor of peace and arbitration. Under the auspices of this institution, for its 18 years of continual existence have virtually rendered it a permanent institution in the peace movement, there have assembled the most distinguished men and women of the world, representing all creeds and all nations. Throughout the deliberations a most tolerant, sympathetic, and liberal atmosphere prevailed, and beneath it all was the noble influence of Mr. Smiley, who had founded these meetings and who had watched them grow in size, in importance, and in power. Though the loss of his personality will be keenly felt in the future workings of this splendid institution, still the fruition of his efforts will live on forever, a silent tribute to the man with a mission.

In the splendid array of noted diplomats, statesmen, and men of literary talents who have contributed to the fame and glory of Peru, Sr. DON EUGENIO LARRABURE Y UNÁNUE occupies a position of peculiar prominence. Sr. Larrabure is the grandson of the well-known scientist Hipólito Unánue, who, it is claimed, was the first



Sr. DON EUGENIO LARRABURE Y UNÁNUE

NOBEL PRIZE FOR PEACE, 1911.

South American to be honored with membership in the American Academy of Science of Philadelphia, about 100 years ago.

Educated at home and abroad, Sr. Larrabure was attracted to the political arena in 1871 and founded a paper called *La Republica*, through which he vigorously directed the movements of his party in various campaigns. Several years later he was called upon to serve as editor in chief of the official paper of the Republic, *El Comercio*, after which he was appointed chief of the diplomatic section of the foreign office. The experience acquired in this capacity gave him a deep insight into international affairs, thus equipping him for his next post of importance, that of subsecretary of foreign affairs. His official capacity brought him into close touch with many of the sister nations of South America, and it was not long before he advocated

closer intercourse between all the Republics of America. This naturally made him the ideal man for the position of secretary of foreign affairs, to which he was promoted.

Sr. Larrabure served in this portfolio during the term of Gen. Iglesias, and also in 1892, during the incumbency of President Morales Bermúdez. Resigning office the following year, he devoted himself to extensive agricultural interests and at the same time pursued his literary inclinations. His services as a public official were again demanded, however, and in 1901 he assumed charge of the portfolio

of public works and improvements. In this branch of the public administration he rendered valuable service.

As a man of letters Sr. Larrabure was instrumental in the organization of the Lima Atheneum, a literary society numbering among its members the foremost writers and savants of Peru. The Spanish Historical Academy and the Royal Spanish Language Academy made him their corresponding member in 1880, he being the first Peruvian to receive this marked distinction. Sr. Larrabure also served as first vice president of the Republic during the past presidential term.

Dr. FERNANDO MENDES DE ALMEIDA is one of Brazil's most respected and admired citizens. Prominent



DR. FERNANDO MENDES DE ALMEIDA.

Prominent intellectual of Brazil

in political and newspaper circles, he has won the esteem and affection of all with whom he came in contact. Like his brother, Count Candido Mendes de Almeida, he is a true Pan American and uses to happy advantage the facilities which his position affords him to advocate a closer union between the United States and Brazil.

Dr. Fernando de Almeida holds the position of Federal senator from the State of Maranhao and wields a commanding influence in that dignified body. As editor in chief of the *Jornal do Brasil* and of the

Revista da Semana, he has so raised the standard of these publications that they are to-day worthy exponents of the press of South America. The doctor is also a student and scholar of high attainments. In matters of social and juridical science he ranks as an eminent authority in learned circles.

His brother, Count Candido Mendes de Almeida, it will be recalled, recently visited the United States as delegate to the International Congress of Chambers of Commerce, and other important gatherings, where he made a most favorable impression by his genial personality, ready wit, and high ideals. It is sincerely hoped that this country may soon be honored with a visit from his brother, Dr. Fernando de Almeida.

SR. FRANCISCO ESCOBAR is the able and energetic consul general of the Republic of Colombia in New York City. Highly cultured, splendidly endowed with a liberal education, and possessing a genial and attractive personality, he is exerting a noteworthy influence in his efforts to bind stronger the ties of commerce and comity between the United States and his country.

Sr. Escobar received his professional education in the United States, where he acquired a host of friends and acquaintances. Later he returned to Colombia to serve his country in



SR. DON FRANCISCO ESCOBAR,
CONSUL GENERAL OF COLOMBIA IN NEW YORK CITY.

official capacity, and then again chose United States as home and headquarters for his commercial activities. This frequent travel back and forth has equipped Sr. Escobar with a thorough practical knowledge of the social and economic conditions, both of his own country and that of the United States, and has rendered him eminently qualified for the important position he now occupies.

Sr. Escobar was born at Manizales, Colombia, in 1865, and attended school at Medellin. At the age of 19 he came to New York and after a year of preparatory work entered Columbia University. In 1889 he was graduated with the degree of mining engineer and metallurgist.

tour of study and investigation through the leading mining centers of the country. He then returned to Colombia and became engineer of the Antioquia Railroad, but resigned the position shortly afterwards to engage independently in the practice of his profession. His unusual success in practice brought him the honor of an offer to become assistant director of the mining school at Medellin. He accepted this call, and during the years that he taught at the school a high standard of scholarship obtained.

In the interim Sr. Escobar made another trip to the United States, and married an American young lady, one of Cleveland's social



SR. DON GARCIA DE PAREDES.

Secretary of the Civil Division of the Supreme Court of Panama.

belles, and then returned to resume teaching at Medellin. Once more he left Colombia, coming to New York to engage in business. He organized and directed several commercial enterprises and was establishing a successful export trade with his country when he was proffered the position of consul general at New York City, which he accepted. The multiplicity of the duties in this new position engaged so much of his time that he was obliged to give up all his private interests in the businesses he started.

With the election of Sr. DON GARCIA DE PAREDES as secretary of the civil division of the supreme court of justice of Panama, a new and worthy honor has been bestowed upon one who has become prominently identified with the movement of promoting commerce and comity between the American Republics. Sr. Paredes has held various positions of importance, both official and commercial, in his own country as well as in the United States, and has developed a deep feeling of appreciation of the benefits derived from a growing exchange of trade between nations. Toward the accomplishment of this end he exerted his best offices while he was consul general of Panama in New York.

Sr. Paredes was born on July 24, 1863, at Panama City. He pursued his studies at the Jesuit College. At an early age he entered

the service of the Pacific Steam Navigation Co., where he obtained practical training in the branches of commerce and displayed such aptitude in his work that he was advanced to the position of agent at the port of Buenaventura, the most important port of Colombia and of the Pacific coast of South America. Terminating his connection with this company, Sr. Paredes next joined the staff of the Panama Railroad Co., and soon after his affiliation with this company became assistant cashier in the treasury department, a most responsible and trustworthy position. His association with this company was curtailed by his election to an important position with the Federal tribunal of accounts (Tribunal de Cuentas). The election was made by the National Assembly in 1908, and the next year that same distinguished body advanced him to the position of president of this tribunal. Here he remained until 1910, when he resigned to accept the position of Consul General at New York, with jurisdiction over a large group of Northern and Eastern States. While the incumbent of this important post Sr. Paredes was elected secretary of the civil division of the supreme court, to assume which position he recently sailed from New York.

Sr. Paredes is a member of a number of clubs and scientific organizations, among which are the National Geographic Society, of Washington, and the Society of International History, of Paris, which presented him with a diploma and gold medal.

It must be a source of much satisfaction to friends of Pan America to learn of the frequent occasions when fitting expression is given to this cause. While in the United States the subject of closer acquaintance with the Latin American Republics is constantly being discussed by the leading men of affairs, it is gratifying to note that a corresponding reciprocal sentiment is being voiced in the various countries to the south.

A conspicuous example of such friendly utterance occurred at Santiago, Chile, on July 4, 1912, at the celebration of the one hundredth anniversary of the adoption of the national flag of that Republic. The exercises were arranged on an elaborate scale and were carried off with the spirited enthusiasm and characteristic precision of the sister American nations.

The main feature of the program was held outdoors, in the spacious Plaza de Armas, where stands the imposing monument to Portales, the great Chilean hero. Here assembled a large gathering of patriotic citizens to commemorate a notable event in the history of Chile, the adoption of an independent national emblem. The occasion was graced by the presence of His Excellency the President of the Republic, members of his cabinet, and other high Government and diplomatic officials.

The principal address was delivered by Sr. DON DAVID MONTT, a prominent son of Chile, whose name is closely identified with the various movements of his country to promote the commerce, comity, and confraternity of the American nations. He is a member of the distinguished Montt family, which has helped make intensely interesting the history of Chile.

The speaker delivered an eloquent address conveying the ideals of his nation in the interests of peace and harmony between the countries of the world, saying:

Instead of contemplating the formidable spectacle of one half the world in arms



SR. DON DAVID MONTT

Ardent advocate of closer Pan American relations.

against the other half, we shall see in the future the "United States of the World," a single Congress, one only, opening everywhere schools, founding colonies, protecting and instructing the masses, making life cheaper and generalizing its commodities, protecting really and effectively whatever humble creature in order that he may raise himself to the highest positions which his virtues and intelligence entitle him to aspire to; we shall see all men traveling openly, freely, among all the nations of the earth and meeting everywhere equality, liberty, brotherly love.

He then spoke of the struggles of the United States of America for liberty, and pointed out how the history of his own country closely resembled it, concluding with a splendid tribute to their national hero, José Miguel Carrera who

"raised the first national flag." Outlining the events leading up to the recognition of Chile as an independent nation, Sr. Montt continued:

Now that through the examples of Washington and Lincoln we have succeeded in becoming a nation of people, educated, fraternal, and also powerful, let us honor, fellow-citizens, the illustrious leader and martyr who willed us this flag; this to-day is the desire of our people. And as we have at this time reconstituted the magnificent and historical scene of the journey of 1812, let us recall, reccho also, the historical and enthusiastic clamor, "Vivan los Estados Unidos de America! Viva el Gen. Carrera! Viva! Viva! Viva! mil veces viva la Bandera de Chile!" (Long live the United States of America; long live Gen. Carrera; one thousand times again long live the flag of Chile.)

The Consular Service of the United States has succeeded in developing a splendid array of officials who are doing a wonderful work in bringing closer together through commercial intercourse their own country and the nations to which they are accredited. Years of service in foreign lands afford these men an unusual opportunity to study closely and intimately the peoples, their customs, and institutions, and serve to bring about a broadness of mind and a sympathetic temperament which become potent factors in further cementing the ties of commerce and comity between nations. In this connection Latin America is especially fortunate. With 20 Republics naturally grouping themselves as part of the Pan American Union, the change of residence from one Latin-American post to another necessarily widens the field for promoting better understanding through more frequent intercourse and through the common ties of interest and association thus produced.

From this class of officials the BULLETIN is pleased to include in this column the portraits of Stuart Jamieson Fuller, Esq., the consul at Iquitos, Peru, and Graham Hawes Kemper, Esq., the consul at Cartagena, Colombia.

Mr. FULLER entered the United States Consular Service on April 20, 1906, as vice and deputy consul general at Honkoku, China. Two years later, after due



STUART JAMIESON FULLER,
CONSUL AT IQUITOS, PERU.

competitive examination on November 10, 1908, he won an appointment as consul at Goteborg, Sweden. He occupied this post from July 29, 1909, until he was detailed as vice consul in charge of the consulate at Naples—a much larger and more responsible office. Here he was stationed from October 12, 1910, to January 10, 1911. On April 11, 1912, he was appointed consul at Iquitos, Peru, of which consulate he is now in charge.

Mr. Fuller is a native of Keokuk, Iowa, where he was born on May 4, 1880. He is a graduate of the University of Wisconsin, and before entering the consular service he engaged in railway and export business for several years.

In charge of the consulate at Cartagena, Colombia, is GRAHAM HAWES KEMPER, Esq. Mr. Kemper was born in Bethany, West Virginia, April 15, 1877. After a common-school education he entered Transylvania University, from which he graduated with the degree of B. S. The following year he obtained a master's degree at Kentucky State University. Coming to Washington, Mr. Kemper pursued special courses both at George Washington and at Georgetown Universities. He then taught school here and in the Philippine Islands, and from 1909 to 1911 he was connected with the United States Civil Service Commission. While still with this department

Mr. Kemper successfully passed a competitive consular examination and was appointed to his present post at Cartagena on August 19, 1911.



GRAHAM H. KEMPER, Esq.,
United States Consul at Cartagena, Colombia

The recent appointment by the President of Panama of WALTER SCOTT PENFIELD, prominent international lawyer of Washington, District of Columbia, to the position of counselor of the legation of Panama, furnishes a notable example of how the countries of the Pan American Union are striving to promote better understanding. The interchange of such representative men in posts of importance gives to the spirit of Pan Americanism a genuine expression of sincerity

which must advance the cause. Contemporaneous with this appointment came the announcement that Mr. Penfield had also been selected by Panama to represent her as attorney in the settlement of the boundary question with Costa Rica which will be submitted for decision to Chief Justice White, of the United States Supreme Court, who will act as arbitrator.

Mr. Penfield has for many years been identified with interests in Latin America. In 1902 he was appointed United States secretary of The Hague court in the arbitration of the Pious fund case between Mexico and the United States. The following year, in the arbitration of the Venezuelan preferential treatment case, in which many of

the countries of Europe participated, he was honored with the appointment of secretary of the Venezuelan delegation as well as of the United States delegation.

Born in Auburn, Indiana, February 13, 1879, Mr. Penfield prepared for college at the Howe Military School. At the age of 17 he entered the literary department of the University of Michigan, from which he graduated in 1900 with the degree of B. A. He then entered the law school of George Washington University, at Washington, District of Columbia. While at the law school he was employed in the legal division of the Department of State, where his father, the late Judge William L. Penfield, held the position of solicitor of the department.

On completion of his legal course in 1903, Mr. Penfield commenced to practice in his native city in Indiana. His ability won for him a conspicuous place and he was elected city, and later county, attorney. Desiring to expand his activities over a wider field, however, he came to Washington to join his father in the practice of international law, and with his previous experience in Latin America succeeded in establishing a large practice, especially in matters pertaining to Latin America.

Mr. Penfield is a member of the American Society of International Law, the American Society for the Judicial Settlement of International Disputes, the Pan American Society of the United States, the Mexico Society of New York, and was professor of international law in the postgraduate school of the Washington College of Law.



WALTER SCOTT PENFIELD, ESQ.,

Counselor of the Department of State, Washington.



PAN AMERICAN NOTES

THE new year has started off most auspiciously for Latin America. Everywhere there is ample evidence of material progress and development, and the desire for closer associations and better understanding seems to be the inspiring thought in all the countries of Pan America. During the past year Pan Americanism in its highest ideals was cherished and fostered by all the countries embraced in the Pan American Union, and the sentiments have on frequent occasions crystallized into concrete forms of expression. Friendly exchange of visits by important representative officials, substantial gifts in the form of monuments, homes for legations, and various other ways have been used by the countries to manifest their willingness to get closer together with their neighbors and to lay aside, in generous fashion, differences of the past. The most notable instance, perhaps, of two countries renewing old ties of commerce and comity is the satisfactory agreement reached by Chile and Peru by which the Tacna and Arica question is to be adjusted, and a treaty of commerce and navigation to be entered into by these two great nations. Preliminary negotiations have been underway for some time and before long it is believed that those bonds of kinship which have so persistently asserted themselves in the sister countries of South America will be further intensified by the treaty and this adjustment. Another factor entering into this movement to promote the rapprochement is the Peruvian Steamship Co., which now has its vessels call at Chilean ports. The exchange of calls by steamships to each other's ports can not but help produce an increased commercial relationship in addition to developing a widespread feeling of concord and harmony. The first vessel of the Peruvian Steamship Co. to dock at a Chilean port since this arrangement was announced was the *Pachitea*, which landed at Valparaíso the latter part of November, and was received with great éclat and enthusiasm by the press and public of that city.

NEW YEAR'S GREETINGS FROM ANDREW CARNEGIE.

The great work which Mr. Carnegie is doing in the interests of peace is constantly winning for him more glory and is fixing his position as a leader in this movement more firmly and securely. The ardent desire of this great philanthropist to see an era of peace and friendship reign over the entire civilized world has been the inspiring motive for the many noble contributions and endowments which he has estab-

lished to promote this worthy cause. In various writings and utterances Mr. Carnegie has always embodied these lofty sentiments, and the many significant thoughts to which he has given expression have been the basis for profound discussion and consideration among leading statesmen of the world. As a New Year's greeting for 1913, Mr. Carnegie issued a little pamphlet, entitled "The World's Unsolved Enigma," which was forwarded to the various embassies and legations at Washington, and, through them, transmitted to the chief executive and minister of foreign affairs of the respective nations. The BULLETIN has much pleasure in quoting from this memorable little document which has brought forth considerable complimentary comment for its author and high words of praise for the genuine ring of sincerity which characterizes the sentiments:

THE WORLD'S UNSOLVED ENIGMA.

Every ruler of men, whether emperor, czar, king, president, prime minister, or secretary of state, knows that the greatest blessing of all for his country and the world at large is international peace. All therefore earnestly desire this, and that anyone in authority desires war becomes unthinkable. This being undoubtedly true our enigma is—why does not the world enjoy the peace which those in authority so earnestly desire and unitedly can so easily acquire?

Here is the answer: While each and every ruler tells us truly that he longs for peace, they mistrust each other because they do not know each other well. They reside apart, receiving false impressions from intermediaries and military, naval and other officials, who see the shadow of the demon war in every movement; having probably been men of war themselves in their youth they judge international questions from the standpoint of this profession. Even ambassadors to the various courts having generally spent most of their youth surrounded by military and naval officials, inhale the atmosphere of international rivalry and suspicion, and hence are liable to doubt or misconstrue the views and peaceful ambitions of other nations.

How, then, is this obstacle to be removed and rulers brought to the realization of the truth that all rulers of men are sincere in their desire for the banishment of war among civilized nations and for the settlement through peaceful means of any disputes that may arise between them?

The answer is obvious. Let the rulers meet often, as friends desirous of drawing their people closer together, secretaries of state especially paying reciprocal visits. Arrange frequent meetings at the different capitals of each small group of officials concerned in this problem, discard distrust and learn to trust each other, and the chief nations will soon begin to act in unison, drawing the others with them into international peace. * * *

BOSTON CHAMBER OF COMMERCE TOUR TO SOUTH AMERICA.

The Boston Chamber of Commerce is to be congratulated on the South American tour which it is planning to start on April 25, 1914, to be gone for a period of several months. This trip is mainly a business one, to afford the members of this progressive commercial organization an opportunity to study, first hand, the markets of South America and the methods for increasing the commercial rela-

tionship between New England and the southern countries. Three months will be consumed in the journey, and the itinerary will include a trip to the Isthmus, where the party will inspect the canal; then a steamer will carry the business men down the west coast, with stops at the more important ports and cities of Colombia, Peru, and Bolivia, until Santiago, Chile, is reached. From there the Trans-Andine Railway will conduct the party over to Buenos Aires. After a six-day stay at this point, during which excursions will be made into the more distant Provinces of Argentina, the party will sail by boat for Montevideo, and will then proceed to the various Brazilian cities, planning to reach Rio de Janeiro about June 29. Five days later a return steamer to New York, with calls at Port of Spain, Trinidad, and Barbados, will bring this visit to an end. Through the diplomatic representatives of these countries in Washington, the Boston Chamber of Commerce has received gratifying assurances that every courtesy will be extended to the visitors, while in many cases official recognition of their coming will be taken, and a great many facilities for their convenience, comfort, and pleasure placed at their disposal. The results of this trip will be of great value and profit to those making it, while the splendid opportunity for becoming better acquainted with the representative men of the countries visited will do much to increase the friendship with the Latin American Republics.

FIFTH CENTRAL AMERICAN CONFERENCE.

The Central American Conference held its fifth annual session at San Jose, Costa Rica, from January 2-16, 1913. This marks the last of the meetings as arranged for by the Central American Peace Conference held at Washington in 1907. On the occasion of its inaugural session the Pan American Union received the following telegram from Sr. Don Faustino Viquez and Sr. Don Manuel Arroyo, the president and secretary, respectively, of the conference:

In compliance with the terms of the treaty of Washington, there to-day assembled at this capital the Fifth Central American Conference, assisted by his excellency, Sr. Don Manuel Castro Quezada, and the following delegates: Sr. Don Faustino Viquez, from Costa Rica; Sr. Dr. Rafael Meza, from El Salvador; Sr. Dr. Manuel Arroyo, from Guatemala; Sr. Dr. Saturnino Medal, from Honduras; and Sr. Dr. Maximo H. Zepeda, from Nicaragua.

At the closing session the conference sent a cablegram to the director general, announcing the successful termination of this notable gathering, to which the director general replied, expressing his congratulations to the gathering on the occasion of their fifth meeting, and conveying the sincere hopes that their deliberations might be fruitful in bringing about a greater uniformity and solidarity in their economic, fiscal, and social intercourse.

INTERNATIONAL CONGRESS OF STUDENTS.

Announcement has recently been made that the Eighth International Congress of Students will be held from August 29 to September 13, 1913, under the auspices of the Cornell Cosmopolitan Club, at Ithaca, New York, and an invitation has been extended to all the student organizations of the world to partake in this great international movement by sending delegates. The object of this gathering is to bring together representatives from all the students of the world in order that the spirit of international brotherhood and humanity may be fostered among them as a result of the deliberations of the congress, and that the students of the world may be united into an all-embracing world organization. The student movement, which has been gaining impetus throughout the world, is a noble monument of the desire of the sturdy and vigorous young men, the leaders of to-morrow, to know their brothers from all over the world, and to develop a strong feeling of friendship and sympathy which shall overcome all such artificial obstacles as race, language, or religion. The huge success of the late International Congress of American Students which was held at Lima, Peru, in the summer of 1912, at which there were students present from a great majority of the American Republics, will doubtless encourage these countries to again send representatives to this world-wide federation. A splendid itinerary has been arranged and the delegates will be afforded ample opportunity to visit the central points of interest in the United States. The committee on organization is now busily engaged working out the details of this important gathering, and under the direction of its energetic chairman, Mr. C. L. Loessin, this congress promises to be perhaps the greatest and most far-reaching in its beneficial effects of any similar convention yet held. Further information regarding the congress will be furnished through the pages of the BULLETIN from time to time, while those desiring specific data are requested to communicate with Mr. Loessin, Cosmopolitan Club, Ithaca, New York.

FELICITATIONS TO "FAIR PLAY."

The Pan American Union extends its felicitations to the editorial staff of *Fair Play*, a weekly review published in New York, which has just successfully completed its first year of existence and is entering upon its second year with new plans for a larger periodical, a broader scope, and a greatly extended influence. This publication will continue to deal in an interesting way with the most important events in the various spheres of human activity with a special diplo-

ment devoted exclusively to matters pertaining to commercial relations of the United States with the Latin American Republics. At the same time it will deal with questions relating to Pan Americanism from the standpoint that the extension of commercial intercourse shall be accompanied by a corresponding growth of friendly feeling and better understanding. Mr. Leopold Grahame, who has given much attention to the political and economic questions of the American Republics, and has written extensively for magazines and newspapers on the subject of Latin America, will be editor in chief of the publication. Fair Play has our best wishes for a happy realization of its ideals to develop commerce and comity among the American nations through its interesting columns.

J. C. OAKENFULL'S WORK ON BRAZIL.

It is with much satisfaction and pleasure that the Pan American Union is advised that Mr. J. C. Oakenfull is now preparing the fourth annual edition of his Handbook on Brazil. These annual contributions on Brazil have won a distinct place in the literature of that country, and as each edition has seen the light of day a broader, more comprehensive, and more attractive volume was noticed. There is every reason to feel that the next edition which will be entitled "Brazil in 1912," will yet surpass its worthy predecessors. Through the courtesy of Mr. Oakenfull, a considerable number of these annual booklets have been made available for distribution by this institution, and the heavy demand for them from all quarters, as well as the highly commendatory notices which they have received at the hands of reviewers, are convincing evidences of the popularity and practicability of them. "Brazil in 1911," which this institution is still distributing, is thus far the largest and most ambitious effort of Mr. Oakenfull along this line. Over 400 pages in volume, abundantly illustrated, with a satisfactory index, it has well been considered a most compact compilation of interesting matter. There is not an imaginable feature of the country, its customs, its climate, its people, industries, or society, as well as every natural feature, but is given close and careful attention. In short, it is a valuable mine of practical information for the student, traveler, and business man.

REDUCED POSTAGE RATES IN SOUTH AMERICA.

With the inauguration of reduced postage rates between the South American countries on January 1, 1913, as provided for in the action of the First South American Continental Postal Congress, which

convened at Montevideo, Uruguay, from January 8 to February 2 1911, a remarkable forward step has been taken to bring the countries concerned into closer touch with each other. While this reduction may not actually increase the volume of correspondence exchanged between the countries, yet it must have a direct and beneficial effect upon the amount of books, magazines, and periodicals circulating through the southern continent. The importance of such a freer interchange of thoughts and ideals through the medium of the press to a group of neighboring countries can hardly be estimated. It means that the activities and the progress of the various countries as recorded in books and magazines will be freely transmitted throughout the length and breadth of the South American continent and will serve to develop those mutual bonds of interest which the noble heroes and historic traditions of South American independence have created. The countries which sent delegates to the Congress were Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela. The action of the conference was ad referendum, and thus far 7 of the 10 countries have ratified the convention affecting the change in postage rates. Brazil, Uruguay, and Venezuela have yet to accept the measure. The nonacceptance, however, will not affect the sending of mail matter to them from other countries, but will prevent their citizens from enjoying the same privilege.

MEMBERS OF PAN AMERICAN UNION STAFF IN LATIN AMERICA.

Three members of the staff of the Pan American Union are now in Latin America—Dr. Albert Hale, Mr. Charles E. Babcock, and Sr. Emilio M. Amores, the first two in South America, and the latter in Cuba. By having the various members of its personnel travel and study the countries embraced in the Pan American Union from time to time, this institution becomes of especial value to the thousands of correspondents and the hundreds of visitors who constantly call upon it for first-hand information concerning local conditions, minute matters of special inquiry, and questions of a general nature. Dr. Hale, who has now been away since August, 1912, is making an extensive tour through South America. He will visit practically each country of the Southern Zone and will submit special articles to the *BULLETIN* embodying the result of his study and observation. The October and December issues of the *BULLETIN* contained articles by Dr. Hale describing the "Port Work of Para." and the "Madera Mamore Railway." In this issue appears his story entitled, "Developing the Amazon Valley." While at Rio de Janeiro, Dr. Hale addressed the

Geographical Society of Brazil, of which he is a member, on the subject of the work and scope of the Pan American Union. In the course of his remark he said:

I am a knight-errant of good will, with peace, fraternity, commerce, the arms of the institution I represent, on my escutcheon, and they are for the United States of Brazil as well as for the United States of America.

His address was enthusiastically received and extensively reproduced in the press of Brazil.

Mr. Charles E. Babcock, of the library staff, sailed on December 28 for South America. Mr. Babcock will endeavor to get into personal touch with the chiefs of the various official departments, statistical bureaus, libraries, and publishers, and seek their cooperation in completing the files of the Columbus Memorial Library and in arranging for the Pan American Union to receive the latest data and documents for use of its information bureau. In this way it is hoped to maintain the reputation of its library as the most comprehensive and practical in the United States on Latin America.

On January 8, 1913, Sr. Don Emilio M. Amores, the chief translator of the Pan American Union, left for Cuba, his native land, where he will spend several weeks. During his stay on the island, Sr. Amores plans to make the work and scope of this institution generally known and will seek to increase the circulation of the BULLETIN throughout the Republic.

NEW ENGLISH NEWSPAPERS IN SOUTH AMERICA.

The appreciation of the importance of the Spanish language in the United States has its gratifying counterpart in the increasing number of newspapers which are being published in the English language in South America. In Peru, the *West Coast Leader*, a weekly periodical published by Mr. J. Vavasoeur Noel, of Lima, has completed its first year of existence with every indication of a healthy and popular growth. Its circulation has branched out in all directions, while the quality of the sheet has constantly maintained a high standard. To-day it has expanded from a 4-sheet newspaper to 16 pages, with special correspondents contributing material from the centers of the United States and Europe. The success of this periodical, as well as that of the other English news sheets, has encouraged the development of the English press, and recently two more publications have seen the light of day. In Rio de Janeiro, Mr. Francis J. Tietzort and Mr. George J. Smith have organized a newspaper known as the *Rio Daily Mail*. It is published in English and makes a specialty of North American news. Two European agencies are also maintained. In Uruguay, under the direction of Mr. Osborne Crocker, a daily

English newspaper is published called The Herald. Its headquarters are in Montevideo and it promises to become quite popular in that country.

STUDY OF SPANISH IN BALTIMORE.

Apropos of the growing interest in the study of the Spanish language throughout the United States as manifested by the reports of colleges, secondary schools, and private business institutions, an interesting announcement has just been brought to the attention of the BULLETIN. In the night-school classes of the City College of Baltimore, Maryland, instruction in Spanish was inaugurated at the beginning of the present school year, and within the few months that this branch of study has been taught the number of students enrolling in the class has increased to the amazing total of 250. The significance of such a large percentage of students entering upon the two-year course to obtain a practical knowledge of the Spanish language can not be overlooked. It is clear and unmistakable evidence that there is an awakening realization of the importance of the relations between the United States and the Latin Republics to the south, an appreciation which augurs well for better understanding and closer intercourse, both social and commercial, between all the Americas.

STEAMSHIP SERVICE BETWEEN PENSACOLA AND PANAMA.

Mr. Leland J. Henderson, secretary of the Commercial Association of Pensacola, Fla., has called our attention to the fact that in our Panama Canal handbook no steamship line is shown from Pensacola to the Canal and South America. This may be true because it was impossible in the haste of preparation to bring out every steamship and railway connection, although an honest effort was made to include all those of general use. Mr. Henderson writes us that Pensacola is coming rapidly forward as a port on the Gulf of Mexico and that it is establishing steamship connections with the Canal and with Latin America which will be of value to the commerce and trade of the United States. We congratulate Pensacola on this fact and wish for it a most prosperous future as a shipping point having to do with our sister republics and the Canal.



SUBJECT MATTER OF CONSULAR REPORTS

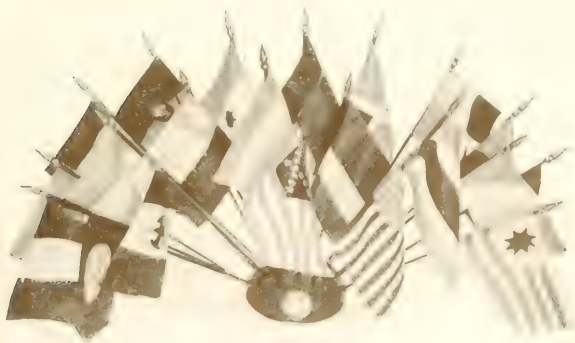
REPORTS RECEIVED UP TO JANUARY 15, 1913.¹

File.	Date.	Author.
ARGENTINA		
	1912.	
Review of the "River Plata"	Nov. 1	R. M. Bartleman, consul general, Buenos Aires.
Regulations of transportation of merchandise by railway and ferryboats.	Nov. 5	Do.
Publication: "Contribution to the Study of Soils".	Nov. 8	Do.
Import and export statistics of Argentina.	Nov. 10	Do.
Automobiles in Argentina.	Nov. 19	Albert G. Ebert, vice consul general, Buenos Aires.
No market for concrete machinery.	Nov. 21	Robert T. Crane, consul, Rosario.
Motocycles—duty.	Dec. 4	Do.
Pottery industry—no material suitable found in country.	Dec. 5	Do.
No chicks produced.	do	Do.
No tonks being produced.	Dec. 6	Do.
Moldings for frames—good market in Buenos Aires—duty.	do	Albert G. Ebert, vice consul general, Buenos Aires.
No market for heroin cigarettes.	Dec. 7	Robert T. Crane, consul, Rosario.
CHILE		
Stoves imported in 1911—duty.	Nov. 4	Alfred A. Winslow, consul, Valparaiso.
Valparaiso—Japanese center.	do	Do.
Rice imports for 1911—duty.	Nov. 5	Do.
Trade and industrial notes.	Nov. 23	Do.
Stock food tonics and veterinary remedies.	Nov. 29	Do.
Market for American goods in Chile.	do	Do.
COLOMBIA		
Colombian notes. Purchase of steel rails, cement and locomotives for Antioquia Railway—New boats for service on Magdalena River.	Dec.	I. A. Manning, consul, Barranquilla.
Market for paper bags—duty.	Dec. 6	Leland Harrison, chargé d'affaires, Bogotá.
Raw materials exported—coffee, rubber, ivory, nuts, and hides.	Dec. 18	Do.
Laws and regulations relating to advertising in Colombia.	do	Do.
No exporting goods through.	do	Do.
DOMINICAN REPUBLIC		
No cottonseed oil mills in Republic.	Dec.	C. M. Hathaway, consul, Puerto Plata.
Value of importations, and duties, during first half of 1912.	Dec. 6	Frank Bohr, vice consul general, Santo Domingo.
GUATEMALA		
Cycles of electric current furnished in Antigua and Quetzaltenango.	Nov. 14	Geo. A. Bucklin, consul general, Guatemala City.
Market for kerosene lamps.	Nov. 18	Do.
Art metal.	Nov. 19	Do.
Rubber goods, market for, duty.	Dec. 27	Do.
Stationery and printing—same file.	Dec. 28	Do.
HONDURAS		
Great industrial machinery.	Nov. 29	David J. D. Myers, consul, Puerto Cortes.
MEXICO		
Annual report for year ended Dec. 31, 1911.	Nov. 1	A. J. Lespinasse, consul, Frontera.
Graphite, production, exports and brokers.	Nov. 13	Thomas W. Bowman, vice consul, Nogales.
Automobiles.	Nov. 18	Do.
Electric current in use in Tampico.	Nov. 20	Thomas H. Bevan, vice consul, Tampico.
Finon Cantonillo put at Mexico.	do	Do.
Requirement for securing necessity of household effects, agricultural effects, etc., of colonists.	Nov. 26	H. M. Walcott, vice consul general, Mexico City.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America but merely those that are supplied to the Pan American Union as likely to be of service to this institution.

Reports received up to January 1, 1971. Continued

Date.	Date.	Date.
MEXICO—continued.		
American Lumber Company, Tampico.....	Dec. 12	Thomas H. Bevan, vice consul, Tampico.
Captain Law, arrival in port of Mexico.....	Dec. 6	H. M. Walcott, vice consul general, Mexico City.
New oil refinery in Tampico.....	Dec. 5	Thomas H. Bevan, vice consul, Tampico.
"Seeds of Alligator Pears".....	Dec. 6	Marion Letcher, consul, Chihuahua.
New American trade mission to Mexico.....	Dec. 4	Thomas H. Bevan, vice consul, Tampico.
Export of sulphur from Tampico.....	Dec. 4	Arnold Shanklin, consul general, Mexico City.
Export of oil from Tampico.....	Dec. 8	A. L. Loper, consul, Tampico.
Motion-picture business.....	Dec. 6	William E. Brown, consul, Tampico.
PANAMA.		
New American trade mission to Panama.....	Nov. 29	Cornelius Ferris, jr., consul, Asuncion.
PERU.		
Peruvian exports, 1911, 1910, 1902.....	Nov. 9	Edward D. Brown, consul, Callao.
Extension of hours in port of Callao.....	Nov. 2	Do.
Distribution of Peru's exports for 1911.....	Dec. 1	Do.
PRAGUE.		
Wagon and passenger cars for export from Prague.....	Oct. 28	F. W. Goding, consul, Montevideo.
Peru's exports to Prague.....	Oct. 20	Do.
Motion picture business.....	Dec. 1	Do.
VALPARAISO.		
Tariff classifications: Liquid venetian oil-grinders.....	Nov. 13	Harold F. Whitcomb, consul, Valparaiso.
Decree concerning importation and exportation of oil.....	Nov. 25	Do.
Decree classifying portable ovens.....	Nov. 2	Do.
Decree annulling customs duty on imported gold coins.....	Nov. 29	Do.
Ordinance relative to bakeries.....	Dec. 2	Do.
Notice of arrival of new American trade mission to Chile.....	Dec. 10	Do.
Tariff classification for modeling paste and beehives.....	Dec. 1	Do.
Tariff classifications, decrees, and copy of new tariff law.....	Dec. 21	Do.



COMMERCE OF ECUADOR

THE latest official publication of the foreign trade of Ecuador is for the year 1910, from which it appears that the corrected figures are: Imports, 16,476,603 sucres; exports, 28,062,363 sucres; total of 44,538,966 sucres. For the preceding year the imports were 18,704,243 sucres; exports, 24,878,799 sucres; total, 43,583,042 sucres. This shows a decrease in the imports of 2,227,640 sucres, and an increase in exports of 3,183,564 sucres, or a net increase in the foreign trade of 955,924 sucres.

Valuing the sucre at 48.6 cents (10 sucres equal £1 sterling) the imports for the year 1910 amounted to \$8,007,629 and the exports to \$13,638,308, or a total of \$21,645,937. The figures for the preceding year were: Imports, \$9,090,262; exports, \$12,091,096; or a total of \$21,181,358, showing a decrease in imports of \$1,082,633; and increase in exports of \$1,547,212, or a net increase in foreign trade of \$464,579.

IMPORTS.

The imports by countries for the years 1908, 1909, and 1910, were as follows:

Countries.	1908	1909	1910
United Kingdom.....	\$3,488,227	\$3,052,870	\$2,455,599
United States.....	1,991,479	2,330,851	2,249,674
Germany.....	2,088,942	1,626,576	1,570,903
France.....	717,933	593,343	525,534
Italy.....	455,659	448,234	336,454
Belgium.....	406,804	425,427	325,351
Spain.....	328,505	322,506	271,390
Salvador.....	48,929	15,820	77,127
Peru.....	354,673	109,601	59,763
Chile.....	62,707	98,538	53,836
Other countries.....	45,741	66,496	81,998
Total.....	9,989,599	9,090,262	8,007,629

The imports for the last three years in broad classifications are as follows:

	1908	1909	1910
	Sucres.	Sucres.	Sucres.
Oils in general.....	132,875	133,218	162,578
Live animals.....	7,090	20,923	17,460
Arms and ammunition.....	338,739	72,101	222,853
Alimentary substances.....	2,447,662	2,264,400	2,641,793
Boots, shoes, and findings.....	267,365	233,662	192,085
Carriages.....	74,719	70,794	29,789
Cements, stones, and earths.....	82,358	111,911	112,028
Leather.....	226,373	270,371	240,868
Drugs and medicines.....	553,941	486,715	476,830
Vessels.....	37,796	22,370	38,752
Hardware.....	1,459,194	1,138,787	1,125,893
Matches.....	84,716	32,371	50,735
Corlage, twine, and thread.....	320,142	316,350	303,606
Musical instruments.....	144,151	112,023	91,229
Jewelry.....	29,327	43,391	9,386
Books, blank and printed.....	110,884	96,862	80,044
Crockery and glassware.....	295,932	253,204	234,623
Lumber, rough and finished.....	229,126	215,845	131,743
Machinery.....	686,977	919,454	719,924

	1908	1909	1910
	<i>Shucos</i>	<i>Shucos</i>	<i>Shucos</i>
Mineral products..	676,475	601,302	480,079
Paper in general..	551,117	334,510	231,678
Petroleum..	119,166	129,998	113,193
Paints and varnishes..	96,822	106,225	81,401
Refrigerated clothing..	828,775	640,737	508,991
Silk fabrics, pure and mixed.	249,714	194,738	133,132
Hats..	44,795	288,681	189,361
Textiles, other than silk..	5,845,816	5,522,477	3,532,847
Vegetables..	109,076	113,647	106,237
Candles..	72,004	223,124	256,060
Wines and liquors..	1,644,004	640,547	719,716
Miscellaneous.....	1,264,881	1,347,849	1,178,097
Total.....	18,692,426	16,938,887	14,441,041
Money.....	1,862,300	1,745,006	2,000,000
Grand total.....	20,554,731	18,704,243	16,476,603
Value in United States gold.....	\$9,989,599	\$9,000,262	\$8,007,020

The following are the principal articles of import for the year 1910, more specifically classified:

Canned goods, 105,145 sucres, of which 49,585 sucres from the United States, 15,786 sucres from Germany, 14,541 sucres from France, and 8,834 sucres from Italy.

Lard, 977,509 sucres, practically all from the United States.

Rice, 226,794 sucres, of which 200,279 sucres from Germany and 21,975 sucres from Peru.

Sugar, 128,617 sucres, of which 121,677 sucres from Salvador, 4,375 sucres from Germany, and 1,988 sucres from the United States.

Wheat flour, 622,335 sucres, of which 585,594 sucres from the United States and 32,853 sucres from Belgium.

Cotton lace, 116,869 sucres, of which 87,624 sucres from the United Kingdom, 19,938 sucres from Germany, and 8,947 sucres from France.

Cotton piece goods, 1,816,711 sucres, of which 1,164,064 sucres from the United Kingdom, 304,616 sucres from the United States, 102,306 sucres from Germany.

Woolen piece goods, 597,602 sucres, of which 363,413 sucres from the United Kingdom and 91,711 sucres from Germany.

Silk piece goods, 41,088 sucres, of which 20,184 sucres from the United Kingdom, 10,786 sucres from France, and 5,363 sucres from Germany.

Leather for shoes, 199,135 sucres, of which 87,843 sucres from the United States, 76,687 sucres from Germany, 24,059 sucres from the United Kingdom, and 8,766 sucres from France.

Coal, 119,049 sucres, of which 98,254 sucres from the United States and 18,628 sucres from Australia.

Boots and shoes (leather), 134,075 sucres, of which 91,740 sucres from the United States, 20,900 sucres from Spain, and 15,562 sucres from Germany.

Knit cotton undershirts, 206,972 sucres, of which 105,549 sucres from Spain, 34,902 sucres from the United Kingdom, 28,170 sucres from Germany, 20,366 sucres from France, and 13,466 sucres from Italy.

Woolen shawls, 76,350 sucres, of which 66,786 sucres from Germany, 3,183 sucres from the United Kingdom, 2,306 sucres from Spain, and 2,144 sucres from the United States.

Cotton stockings, 133,900 sucres, of which 103,006 sucres from Germany, 14,051 sucres from Spain, and 3,567 sucres from France.

Cotton handkerchiefs, 92,400 sucres, of which 85,625 sucres from the United Kingdom, 2,792 sucres from Italy, and 2,525 sucres from Germany.

Straw hats, 80,400 sucres, of which 27,238 sucres from Italy, 24,162 sucres from the United Kingdom, 16,512 sucres from Germany, and 8,276 sucres from France.

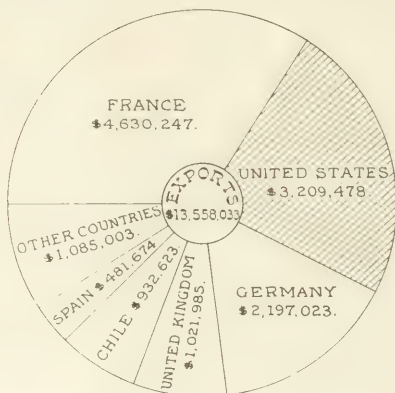
Fence wire, 119,777 sucres, of which 98,452 sucres from the United States, 10,102 sucres from Germany, and 2,500 sucres from the United Kingdom.

Corrugated iron, 145,476 sucres, of which 79,656 sucres from the United States, 52,562 sucres from the United Kingdom, and 13,131 sucres from Germany.

Spool cotton, 138,475 sucres, of which 99,978 sucres from the United Kingdom, 21,917 sucres from Belgium, 12,729 sucres from Germany, and 2,386 sucres from France.

Machetes, 93,753 sucres, of which 78,476 sucres from the United States, 7,945 sucres from the United Kingdom, and 7,252 sucres from Germany.

ECUADOR COMMERCE - 1911 EXPORTS \$13,558,033.



PAN AMERICAN UNION

Industrial machinery, 99,635 sucres, of which 35,237 sucres from the United States, 21,930 sucres from Germany, 17,334 sucres from Belgium, and 13,333 sucres from France.

Sewing machines, 55,310 sucres, of which 61,162 sucres from the United States, 6,646 sucres from Germany, and 5,331 sucres from the United Kingdom.

Other machinery, 206,895 sucres, of which 100,801 sucres from the United States, 53,205 sucres from the United Kingdom, 38,860 sucres from Germany, and 9,401 sucres from France.

Iron piping, 68,597 sucres, of which 32,735 sucres from the United States, 14,646 sucres from Germany, 13,715 sucres from Belgium, and 5,949 sucres from the United Kingdom.

Common glassware, 64,721 sucres, of which 29,876 sucres from Germany, 14,084 sucres from the United States, 10,653 sucres from Belgium, 6,461 sucres from France, and 3,608 sucres from the United Kingdom.

Common soap, 338,572 sucres, of which 91,626 sucres from Germany, 91,546 sucres from the United Kingdom, 87,442 sucres from Belgium, 57,907 sucres from France, and 5,080 sucres from the United States.

Furniture, 87,378 sucres, of which 46,272 sucres from Germany, 18,529 sucres from the United States, 9,477 sucres from France, 3,749 sucres from the United Kingdom, 3,598 sucres from Belgium, and 3,050 sucres from Spain.¹

Candles, 256,060 sucres, of which 127,896 sucres from the United Kingdom, 100,080 sucres from Belgium, 19,241 sucres from Germany, and 6,480 sucres from the United States.

Railway material of all kinds, 187,307 sucres, of which 112,128 sucres from the United States, 49,368 sucres from Belgium, and 15,050 sucres from Germany.

Beer, 208,811 sucres, of which 181,840 sucres from Germany, 11,804 sucres from the United States, and 11,641 sucres from the United Kingdom.

Distilled liquors, 84,333 sucres, of which 52,447 sucres from France, 15,032 sucres from the United Kingdom, 5,445 sucres from Spain, and 4,579 sucres from the United States.

Wines, 410,740 sucres, of which 113,213 sucres from France, 104,474 sucres from Italy, 95,201 sucres from Spain, and 31,026 sucres from the United States.

Drugs and medicines, 238,092 sucres, of which 104,443 sucres from the United States, 84,335 sucres from France, and 21,058 sucres from the United Kingdom.

Rifle cartridges, 82,000 sucres, all from Germany.

Kerosene, 205,051 sucres, of which 191,196 sucres from the United States and 9,931 from Germany.

EXPORTS.

The exports by countries for the years 1908, 1909, and 1910 were as follows:

Countries.	1908.	1909.	1910.
France.....	\$1,911,465	\$1,175,805	\$4,785,613
United States.....	1,764,009	3,720,404	4,082,112
Germany.....	964,062	1,117,817	2,243,607
United Kingdom.....	1,712,119	1,215,769	1,136,827
Spain.....	777,399	284,252	399,656
Chile.....	255,600	391,004	383,071
Italy.....	112,640	222,429	150,176
Austria-Hungary.....	100,000	100,000	100,000
Netherlands.....	43,558	311,549	8,800
Peru.....	72,300	156,227	1,000
Panama.....	33,102	51,137	1,817
Other countries.....	130,721	138,168	1,000
Total.....	12,907,774	12,091,096	13,638,308

According to the report of United States Consul General Herman R. Dietrich, Guayaquil, the exports for the year 1911 by countries were as follows: France, \$4,630,247; United States, \$3,209,478; Germany, \$2,197,023; United Kingdom, \$1,021,985; Chile, \$932,623; Spain, \$481,674; Austria-Hungary, \$183,246; Netherlands, \$164,516; Italy, \$140,289; Peru, \$98,496; Panama, \$78,070; other countries, \$120,386; total, \$13,558,033.

The exports by articles for the years 1908, 1909, and 1910 were as follows.

	1908	1909	1910
	<i>Sucres.</i>	<i>Sucres.</i>	<i>Sucres.</i>
Alligator skins.....	24,230	11,040	18,100
Cacao.....	17,737,040	14,522,617	16,213,670
Coffee.....	1,015,938	1,037,320	1,500,540
Cotton.....	1,665	4,591	38,478
Fresh fruits.....	108,569	127,335	63,463
Bananas.....			59,989
Gold (bars, dust, etc.).....	401,368	286,993	234,880
Gold ore.....	358,594	261,743	276,781
Panama hats.....	1,598,568	2,310,142	2,584,342
Mocora straw.....	46,680	33,940	27,245
Toquilla straw (for hats).....	67,274	99,465	61,153
Hides of neat cattle.....	333,407	452,797	528,240
Ivory nuts.....	985,252	3,061,942	3,427,883
Rubber.....	843,522	1,540,668	2,065,903
Tobacco.....	30,110	71,911	28,706
Miscellaneous.....	174,419	154,790	162,750
Total.....	23,726,636	23,977,294	27,292,123
Reexports.....	2,832,571	901,505	770,240
Grand total.....	25,559,207	24,878,799	28,062,363
Value in United States gold.....	\$12,907,774	\$12,091,096	\$13,638,308

According to the report above mentioned of Consul General Dietrich, the exports by articles for 1911 were: Cacao beans, \$8,012,296; Panama hats, \$1,404,501; coffee, \$1,119,558; ivory nuts, \$868,964; rubber, \$682,557; gold ore, \$225,750; hides, \$209,996; fruits, \$71,930; gold bullion and dust, \$37,321; miscellaneous, \$924,515; coined money, \$645; total, \$13,558,033.

In 1910 the exports of articles in the table above were to countries as follows:

Alligator skins, 48,134 kilos, all to the United States.

Cacao, 36,305 tons, of which 19,658 tons, worth 8,986,855 sucres, to France; 8,162 tons, worth 3,461,878 sucres, to the United States; 3,945 tons, worth 1,724,887 sucres, to Germany; 1,605 tons, worth 776,960 sucres, to Spain; 1,703 tons, worth 703,239 sucres, to the United Kingdom; 488 tons, worth 225,107 sucres, to Austria-Hungary; and 367 tons, worth 179,040 sucres, to the Netherlands.

According to Mr. Dietrich's report, in 1911, the exports of cacao were: To France, \$4,317,580; to the United States, \$1,536,954; to Germany, \$1,031,259; to Spain, \$435,925; to the United Kingdom, \$255,653; and to Austria-Hungary, \$182,146.

Coffee, 3,938 tons, of which 1,610 tons, worth 585,911 sucres, to Chile; 1,420 tons, worth 553,159 sucres, to the United States; 344 tons, worth 132,667 sucres, to Germany; 266 tons, worth 107,997 sucres, to France; 227 tons, worth 89,296 sucres, to Panama; and 65 tons, worth 27,191 sucres, to the United Kingdom.

According to Mr. Dietrich's report, in 1911 the exports of coffee were: To Chile, \$435,012; to the United States, \$349,983; to Germany, \$145,135; to France, \$90,668; and to Spain, \$32,402.

Cotton, 68,426 kilos, of which 55,941 kilos, worth 30,879 sucres, to the United States and 8,473 kilos, worth 4,690 sucres, to the United Kingdom.

According to Mr. Dietrich's report, in 1911 the exports of cotton were: To the United States, \$9,899; to the United Kingdom, \$3,823; to Germany, \$1,150.

Fresh fruits, mostly oranges, with some mangoes, pineapples, lemons, and tamarinds, 2,112 tons, nearly all to Chile.

Bananas, 1,838 tons, of which 1,800 tons, worth 57,745 sucres, to Chile, and the remainder to Peru.

Gold (bars, dust, etc.), all to the United States, except 5,852 sucres to Germany.

Gold ore, all to the United States, except 20 sucres to France.

Panama hats were exported in three grades, as follows: Fine, worth 45,663 sucres, of which 22,391 sucres to the United States, 6,762 sucres to Panama, 3,700 sucres to

Chile, 2,500 sucres to Argentina, and 2,000 sucres to Uruguay, and the United Kingdom, each. Medium fine, 1,872,372 sucres, of which 725,866 sucres to the United Kingdom; 541,520 sucres to the United States, 391,409 sucres to Germany, 47,758 sucres to France, 42,462 sucres to Cuba, 27,757 sucres to Chile, and 18,100 sucres to Costa Rica. Ordinary, 666,307 sucres, of which 298,433 sucres to the United Kingdom, 231,558 sucres to Germany, 109,983 sucres to the United States, 13,280 sucres to Uruguay, and 3,520 sucres to Panama.

According to Mr. Dietrich's reports the exports in 1911 of all kinds of Panama hats were: To the United Kingdom, \$599,113; to Germany, \$385,507; and to the United States, \$236,187.

Mocora straw, 22,906 kilos, all to Peru.

Toquilla straw, 72,509 kilos, of which 56,891 kilos, worth 48,183 sucres, to Peru; 12,222 kilos, worth 9,810 sucres, to Germany; 1,865 kilos, worth 1,600 sucres, to France; and 1,420 kilos, worth 1,440 sucres, to Belgium.

Hides of neat cattle, 931 tons, of which 551 tons, worth 340,033 sucres, to the United States; 201 tons, worth 102,800 sucres, to the United Kingdom; 124 tons, worth 55,145 sucres, to Germany; and 46 tons, worth 21,784 sucres, to France.

According to Mr. Dietrich's report, in 1911 the exports of hides were: To Germany, \$68,930; to the United States, \$46,745; to the United Kingdom, \$43,125; and to France \$19,947.

Ivory nuts were exported in the shell and shelled, as follows: In the shell, 9,215 tons, worth 1,426,916 sucres, of which 744,831 sucres to Germany, 553,505 sucres to the United States, 49,994 sucres to France, 41,785 sucres to the United Kingdom, and 33,017 sucres to Italy. Shelled, 7,520 tons, worth 2,000,967 sucres, of which 868,219 sucres to Germany, 595,246 sucres to France, 221,973 sucres to Italy, 181,447 sucres to the United States, and 99,253 sucres to the United Kingdom.

According to Mr. Dietrich's report, in 1911 the exports of ivory nuts were: \$420,466 to Germany, \$163,995 to France, \$115,190 to the United States, \$108,876 to Italy, and \$47,241 to the United Kingdom.

Rubber, 553 tons, of which 443 tons, worth 1,632,103 sucres, to the United States; 98 tons, worth 394,922 sucres, to Germany; and 7 tons, worth 23,461 sucres, to the United Kingdom.

According to Mr. Dietrich's report, in 1911 the exports of rubber were: To the United States, \$571,075; to Germany, \$100,700; and to the United Kingdom, \$10,194.

Tobacco, 74,731 kilos, of which 40,734 kilos, worth 11,985 sucres, to Germany; 20,975 kilos, worth 9,154 sucres, to Peru; and 11,327 kilos, worth 5,910 sucres, to Belgium.

Under miscellaneous, the principal exports were: Horses, 11,360 sucres; tree cotton wool, 12,705 sucres; salt, 11,000 sucres; sole leather, 6,274 sucres; and heron plumes (aigrettes), 5,800 sucres.



COMMERCE OF HAITI FOR 1911

The total foreign commerce of Haiti for the fiscal year ending September 30, 1911, according to a report received from United States Consul John B. Terres, Port au Prince, amounted to \$26,501,777, of which \$7,948,117 was imports and \$18,553,660 was exports. According to Mr. Terres, this is a gain over the figures of 1910 of \$266,117 in imports and \$3,078,329 in exports.

IMPORTS.

The imports by countries for the years 1909, 1910, and 1911 were as follows:

	1909	1910	1911
United States.....	\$4,271,046	\$5,702,065	\$5,790,203
United Kingdom.....	586,190	301,770	886,517
Germany.....	196,886	398,848	439,732
France.....	644,315	805,924	331,849
All other countries.....	182,241	473,139	499,816
Total.....	5,880,678	7,681,746	7,948,117

There are no statistics published of the total imports by either articles or value.

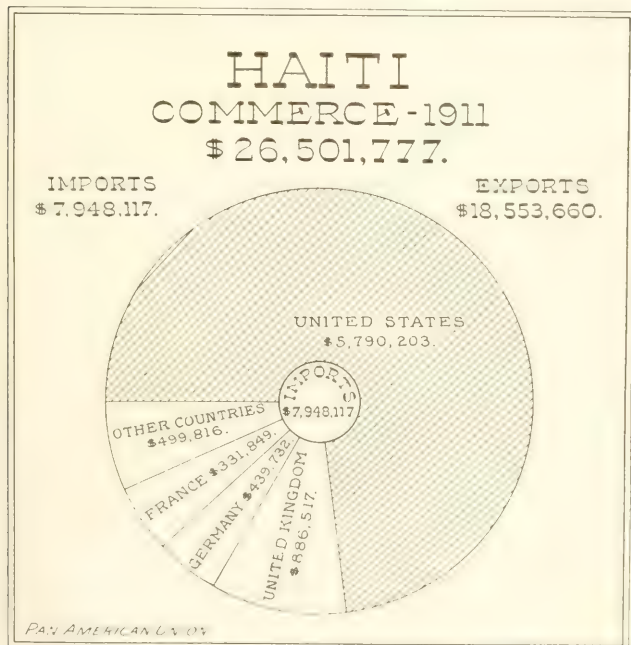
According to Consul Terres, the following are the principal articles of import by quantities from the United States:

Articles.	Quantity.	Articles.	Quantity.
DRY GOODS.		GLASS AND TABLE WARE.	
Cotton cloth:		Crockery and dishes.....dozen.	528
Bleached.....yards..	3,400,995	Decanters.....do.....	750
Unbleached.....do.....	3,600,800	Lamps.....do.....	3,090
Checks.....do.....	4,258,810	Lamp chimneys.....do.....	2,800
Prints.....do.....	3,843,423	Tumblers.....do.....	2,800
Denims.....do.....	2,932,740	Tableware.....cases.	562
Drills.....do.....	2,666,528		
Duck.....do.....	10,464	HARDWARE, ETC.	
Nankinette.....do.....	5,534,535	Axes.....dozen.....	121
Handkerchiefs.....dozen..	4,520	Agricultural implements.....cases.	20
Stockings.....do.....	3,226	Auger bits.....dozen.....	145
Tablecloths.....do.....	263	Axletrees.....number.....	42,097
		Barbed wire.....pounds..	80,200
DRUGS, ETC.		Brass wire.....do.....	17,074
Acids.....cases.....	75	Bee keepers' supplies.....cases.	1,597
Alcohol.....gallons.....	837	Chisels.....dozen.....	81
Drugs and chemicals.....cases..	1,976	Cooking utensils.....pounds..	1,400
Medicaments.....do.....	2,182	Copper sheets.....do.....	25,610
Sul soda.....pounds.....	84,173	Fishhooks.....dozen.....	238,815
Toilet soap.....dozen.....	2,448	Files.....do.....	1,288
		Fishing lines.....pounds..	6,536
FURNITURE, LUMBER, ETC.		Gins, cotton.....number.....	152
Bookcases.....number.....	375	Hatchets.....dozen.....	531
Bedsteads.....do.....	490	Iron bar and sheets.....pounds.	23,743
Cement.....barrels.....	10,830	Iron buckets.....dozen.....	235
Chairs:		Knives, table.....do.....	9,013
Arm, steamer, and rocking,		Nails:	
number.....	1,223	Iron.....pounds.....	437,066
Other.....dozen.....	925	Copper and brass.....do.....	180,132
Lumber.....feet.....	7,386,292	Spades.....dozen.....	243
Meat safes and refrigerators.....number..	103	Scissors.....do.....	4,690
Roofing, galvanized.....pounds..	20,200	Sewing machines.....number	1,975
Tables.....number.....	266	Typewriters.....do.....	144

Articles.	Quantity.	Articles.	Quantity.
PAINTS, OILS, ETC.		PROVISIONS—continued.	
Grease, machine.....	pounds 12,488	Lard.....	pounds 3,891,165
Oils:		Macaroni and vermicelli.....	do.. 64,225
Cottonseed.....	gallons.. 15,526	Macarrel.....	do.. 1,628
Machine.....	do.. 7,642	Onions.....	pounds 53,552
Kerosene.....	do.. 8,774	Salt, pota.....	do.. 16,328
Paints, in oil and dry.....	pounds.. 14,362	Salt beef.....	do.. 3,128
Tallow.....	do.. 15,508	Sausages.....	do.. 16,062
Zinc paint.....	do.. 19,900	Sugar.....	pounds 1,474,785
PROVISIONS.		Tobacco.....	do.. 1,219,793
Bacon.....	pounds.. 7,040		
Biscuits.....	do 129,961		
Butter.....	do 799,885		
Codfish.....	do 3,891,165		
Condensed milk.....	dozen.. 1,658		
Cheese.....	pounds.. 49,102		
Fruit, dried.....	do.. 1,779		
Flour.....	barrels.. 272,763		
Hams.....	pounds.. 165,586		
Herring:			
Smoked.....	boxes.. 169,964		
Pickled.....	barrels.. 30,848		

EXPORTS.

There are no published statistics of the value of Haitien exports, except as above given in gross by Consul Terres.



According to a report of the Statistical Bureau of the National Bank, of the Republic of Haiti, the following table shows the principal exports by quantities for the fiscal year ending September 30, 1911:

Coffee.....	pounds..	51,795,659
Cocoa.....	do....	3,228,350
Cotton.....	do....	4,198,227
Cotton seed.....	do....	8,058,080
Campeche logs and roots.....	do....	75,197,092
Yellow wood.....	do....	83,000
Mahogany.....	cubic feet..	29,180
Gaiac wood.....	pounds..	5,583,346
Cedar.....	do....	72,758
Orange peel.....	do....	462,725
Castor-oil beans.....	do....	2,888
Coconuts.....	do....	7,546
Honey.....	gallons..	190,148
Beeswax.....	pounds..	100,971
Cattle hides.....	do....	115,471
Goatskins.....	do....	230,163
Tortoise shell.....	do....	455
Copper.....	do....	27,475
Corn.....	do....	14,880
Horns.....	do....	9,483
Peas.....	do....	4,921
Horsehair.....	do....	1,581
Candelon wood.....	do....	32,890
Annotto.....	do....	2,604
Zinc.....	do....	6,295
Sponges.....	do....	1,768

According to the report above mentioned of Consul Terres, the value of the exports to the United States invoiced through the American Consular Offices in 1911 was \$350,730, as follows:

Articles.	1911	Articles.	1911
PORT AU PRINCE.		CAPE HAITIEN.	
Beeswax.....	\$1,053	Coffee.....	\$5,741
Cocoa.....	1,327	Goatskins.....	21,573
Coffee.....	290	Logwood.....	35,771
Goatskins.....	27,792	All other articles.....	105
Honey.....	1,523	Total.....	63,190
Lignum-vitæ.....	7,148		
Logwood.....	20,194	GONAIVES.	
Turtle shells.....	1,054	Beeswax.....	624
All other articles.....	2,575	Cotton.....	
Total.....	62,956	Goatskins.....	12,663
AUX CAYES.		Lignum-vitæ.....	22,570
Beeswax.....	2,794	Logwood.....	38,690
Cocoa.....	996	All other articles.....	2,165
Goatskins.....	9,581	Total.....	76,712
Honey.....	1,029		
Logwood.....	18,496	PORT DE PAIX.	
All other articles.....	1,711	Cocoa.....	8,540
Total.....	34,607	Coffee.....	
JEREMIE.		Goatskins.....	5,988
Cocoa.....	34,947	Lignum-vitæ.....	2,685
Goatskins.....	8,070	Logwood.....	12,620
Logwood.....	3,823	Wax.....	5,612
All other articles.....	1,433	All other articles.....	347
Total.....	47,473	Total.....	65,792

COMMERCE OF HONDURAS

FOR 1911

COMPILED from the report of the minister of the treasury and public credit made January 6, 1912, the report of the minister of fomento published in the *Gaceta Oficial* of April 15, 1912, and the report of United States Consul A. T. Haerberle, dated May 23, 1912, the foreign commerce of Honduras for the fiscal year ending July 31, 1911, was: Imports \$3,560,939 gold, and exports 7,561,816 pesos silver. Estimating the gold premium at 150—i. e., 2.50 pesos silver=\$1 gold—the exports expressed in gold would be \$3,024,726, and the total foreign commerce \$6,585,665. For the preceding year the figures were: Imports \$3,019,416, gold, and exports 6,429,790 pesos silver.

IMPORTS.

The imports, by countries, for the last three years were:

COUNTRY.	1908-9.	1909-10.	1910-11.
United States.....	\$1,760,871	\$2,076,422	\$2,024,130
United Kingdom.....	448,510	424,478	500,020
Germany.....	267,515	281,082	300,082
France.....	114,891	101,720	97,771
Central America.....	11,270	67,040	2,000
Spain.....	30,781	18,807	26,987
Italy.....	11,500	11,120	20,000
Mexico.....	3,250	9,928	13,054
Belgium.....	6,081	6,000	2,000
Japan.....	500	—	8,000
Other countries.....	8,399	20,826	8,507
Total.....	2,681,465	2,906,696	3,400,571

NOTE.—Gold premium averaged as follows: 1908-9, 165; 1909-10, 150; 1910-11, 160.

Imports, by articles, for the year 1911, according to the report of Mr. Haerberle, United States consul at Tegucigalpa, were as follows:

Animals.....	8,400
Arms and ammunition.....	81,523
Beverages.....	20,000
Candles.....	18,000
Chemicals and drugs.....	10,000
Coal.....	19,304
Cordage.....	8,000
Cotton and manufactures.....	80,000
Electrical supplies.....	10,000
Hats.....	10,000
Iron and steel manufactures.....	100,000

The above table covers only the imports from the four leading countries, viz, United States, United Kingdom, Germany, and France. However, it comprehends \$3,403,287 out of a total of \$3,560,939.

Machines and machinery.....	\$364,036
Kerosene.....	16,440
Linen.....	4,072
Leather, and manufactures of.....	119,603
Musical instruments.....	12,387
Notions.....	27,337
Oils.....	37,220
Oilcloth.....	8,912
Paints.....	2,184
Paper, and manufactures of.....	310,383
Perfumery.....	12,017
Provisions.....	474,512
Silks, and manufactures of.....	12,106
Textiles, not specified.....	4,509
Tobacco, and manufactures of.....	7,825
Silver.....	60,000
Woods, and manufactures of.....	121,900
Wools, and manufactures of.....	24,023
Miscellaneous articles.....	134,541
Total.....	3,403,287

The imports, by articles, from the four leading countries for the year 1911 were as follows:

Animals: United States, \$3,337; Germany, \$65; United Kingdom, \$59.

Arms and ammunition: United States, \$77,166; Germany, \$3,760; France, \$304; United Kingdom, \$293.

Beverages—Spirits and liquors: United States, \$9,057; France, \$8,812; Germany, \$1,820; United Kingdom, \$900. Wines: United States, \$7,709; France, \$6,919; Germany, \$1,070; United Kingdom, \$39. Beer: United States, \$12,292; Germany, \$7,070; United Kingdom, \$290; France, \$66.

Candles: United States, \$14,892; Germany, \$2,712; United Kingdom, \$950; France, \$2.

Chemicals and drugs: United States, \$111,912; Germany, \$10,554; France, \$6,705; United Kingdom, \$2,108.

Coal: United States, \$17,584; United Kingdom, \$1,720.

Cordage: United States, \$8,240; United Kingdom, \$300.

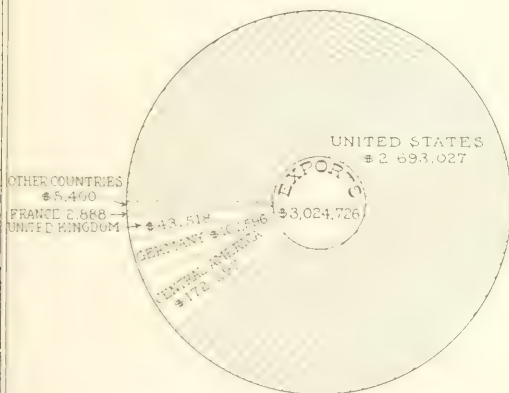
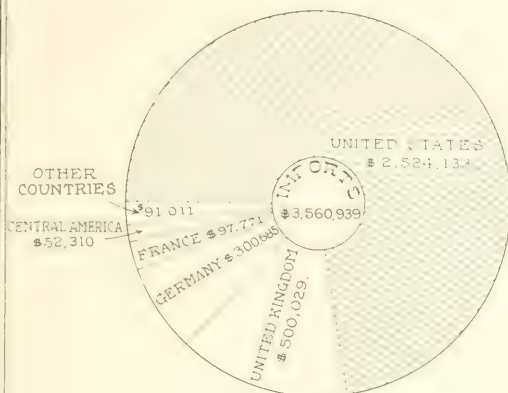
Cotton and manufactures of: Unbleached muslin—United States, \$279,694; United Kingdom, \$27,412; Germany, \$3,093; France, \$1,846. Bleached muslin—United Kingdom, \$61,137; United States, \$30,991; France, \$5,734; Germany, \$3,197. Drills—United States, \$147,958; United Kingdom, \$31,601; Germany, \$10,290; France, \$3,574. Prints—United States, \$119,506; United Kingdom, \$52,792; France, \$3,015; Germany, \$2,957. Thread—United Kingdom, \$40,300; France, \$9,832; United States, \$5,968; Germany, \$5,562. Cambrics—United Kingdom, \$25,887; United States, \$1,754; France, \$1,578; Germany, \$833. Percale—United Kingdom, \$11,323; United States, \$1,914; France, \$1,453; Germany, \$1,296. Pique—United Kingdom, \$1,528; Germany, \$321; United States, \$101; France, \$75. Satine—United Kingdom, \$25,386; United States, \$3,030; France, \$2,851; Germany, \$902. Laces—United Kingdom, \$11,096; Germany, \$5,628; France, \$3,100; United States, \$1,966. Canvas—United States, \$5,517; United Kingdom, \$717; Germany, \$470. Blankets—United States, \$9,037; United Kingdom, \$7,809; Germany, \$5,370; France, \$3,298. Wearing apparel—United States, \$70,784; Germany, \$20,017; United Kingdom, \$16,514; France, \$5,857. Other manufactures—United States, \$31,512; United Kingdom, \$25,107; Germany, \$24,450; France, \$4,781. Raw cotton, \$582—All from the United States.

Electric supplies: United States, \$21,927; Germany, \$2,454.

HONDURAS

COMMERCE-1911

\$6,585,665.



Hats: United States, \$14,248; Germany, \$5,373; France, \$1,600; United Kingdom, \$1,597.

Iron and steel manufactures: Cutlery—Germany, \$7,848; United States, \$5,431; United Kingdom, \$3,037; France, \$693. Farming implements—United States, \$66,114; United Kingdom, \$8,716; Germany, \$8,044; France, \$188.

Machines and machinery: Agricultural and mining—United States, \$46,101; United Kingdom, \$16,117. Steam machinery, not specified—United States, \$29,337; United Kingdom, \$145. Sewing machines—United States, \$39,778; Germany, \$1,201; United Kingdom, \$537. Rails, \$65,076. All from the United States. Tools—United States, \$25,265; Germany, \$2,528; France, \$1,565; United Kingdom, \$1,135. Wire—United States, \$26,709; United Kingdom, \$60. Other articles—United States, \$83,716; United Kingdom, \$12,852; Germany, \$8,791; France, \$3,123.

Kerosene: United States, \$16,248; United Kingdom, \$188; Germany, \$4.

Linen: United Kingdom, \$2,878; France, \$860; United States, \$173; Germany, \$161.

Leather, and manufactures of: Shoes—United States, \$93,391; Germany, \$2,247; United Kingdom, \$171; and France, \$55. Other articles—United States, \$12,430; Germany, \$5,551; United Kingdom, \$5,168; France, \$590.

Musical instruments: United States, \$8,478; Germany, \$3,307; France, \$389; United Kingdom, \$213.

Notions: Germany, \$16,815; United States, \$4,590; France, \$4,448; United Kingdom, \$1,484.

Oils: Codliver—United States, \$4,473; United Kingdom, \$30; France, \$21. Machine—United States, \$3,830; United Kingdom, \$975; Germany, \$25. Oils not specified—United States, \$16,480; United Kingdom, \$7,401; Germany, \$3,192; France, \$793.

Oil cloth: Germany, \$5,511; United States, \$3,122; United Kingdom, \$255; France, \$24.

Paints: United States, \$1,134; United Kingdom, \$993; France, \$52; Germany, \$5.

Paper and manufactures of: Paper and pasteboard—Germany, \$21,295; United States, \$7,406; France, \$2,717; United Kingdom, \$412. Postage stamps, \$272,000—All from the United States. Other articles—United States, \$5,961; Germany, \$483; United Kingdom, \$79.

Perfumery: United States, \$7,726; France, \$2,316; Germany, \$1,799; United Kingdom, \$176.

Provisions: Beans, \$10,313. All from the United States. Fruits of all kinds—United States, \$8,827; United Kingdom, \$524; Germany, \$378; France, \$355. Flour—United States, \$228,404; United Kingdom, \$141; Germany, \$12. Meats, fish and canned goods—United States, \$98,192; United Kingdom, \$8,027; Germany, \$6,759; and France, \$2,613. Rice—United States, \$31,441; Germany, \$4,993; United Kingdom, \$817. Sugar—United States, \$37,924; Germany, \$188; United Kingdom, \$19. Tea, coffee, chocolate, and cacao—United States, \$8,526; United Kingdom, \$588; Germany, \$333; France, \$11. Other articles—United States, \$22,994; United Kingdom, \$1,359; Germany, \$386; France, \$358.

Silk and manufactures of: United States, \$8,087; Germany, \$3,280; United Kingdom, \$561; France, \$178.

Textiles, not specified: United Kingdom, \$1,580; Germany, \$1,551; United States, \$952; France, \$426.

Tobacco and manufactures of: United States, \$7,153; Germany, \$647; United Kingdom, \$25.

Silver: \$60,000—All from the United States.

Woods and manufactures of: Raw material—United States, \$101,997; United Kingdom, \$636. Manufactured articles—United States, \$15,207; Germany, \$2,872; United Kingdom, \$1,180; France, \$8.

Wool and manufactures of: United Kingdom, \$12,654; Germany, \$6,927; France, \$2,656; United States, \$1,786.

Miscellaneous articles: Germany, \$61,288; United Kingdom, \$42,700; United States, \$28,683; France, \$1,870.

Imports by ports of entry for the year 1911 were as follows:

Puerto Cortes.....	\$1,475,662
Amapala.....	1,251,560
La Ceiba.....	701,640
Trujillo.....	114,467
Roatan.....	54,640
Total.....	3,560,939

EXPORTS.

Country.	1908-9	1909-10	1910-11
	<i>Pesos silver.</i>	<i>Pesos silver.</i>	<i>Pesos silver.</i>
United States.....	4,861,599	5,637,928	6,732,567
Central America.....	87,957	241,235	430,742
Germany.....	190,250	399,752	268,991
United Kingdom.....	125,553	125,208	108,759
France.....	3,783	8,195	7,220
Mexico.....		2,550	1,500
Other countries.....	5,952	15,322	12,000
Total.....	5,275,094	6,429,790	7,561,816

The exports from the five major classifications were

	<i>Pesos silver.</i>
Mineral products.....	2,634,057
Vegetable products.....	4,187,754
Animal products.....	728,785
Manufactures.....	7,257
Miscellaneous.....	3,963
Total.....	7,561,816

The exports by classes and articles, according to United States Consul Haerberle's report for the year 1911, were as follows:

Animal products:

Cattle.....	\$178,687
Cattle hides.....	90,433
Skins, alligator.....	1,724
Skins, deer.....	16,444

Mineral matter:

Gold bullion.....	39,552
Ores not specified.....	2,660
Gold and silver cyanides.....	852,224
Silver, coined.....	116,400
Silver in bars.....	4,299
Silver in bullion.....	3,270
Silver and gold bullion.....	3,270

Vegetable matter:

Bananas.....	1,284,171
Coconuts.....	168,064
Coffee.....	75,824
India rubber.....	58,306
Sarsaparilla.....	13,242

Woods:

Mahogany.....	\$58,758
Other woods.....	5,682
Miscellaneous articles.....	23,016
Total.....	3,024,726

The exports, by articles and countries of destination, for the year 1911, were:

Animal matter: Cattle—Central America, \$165,359; United Kingdom, \$13,192; United States, \$136. Cattle hides—United States, \$52,041; Germany, \$37,536; United Kingdom, \$556. Alligatorskins, \$1,724. All to the United States. Deerskins—United States, \$13,794; Germany, \$2,650.

Mineral matter: Gold bullion—Germany, \$25,884; United States, \$12,868; United Kingdom, \$800. Ores not specified, \$2,660. All to the United States. Gold and silver cyanides, \$852,224. All to the United States. Silver, coined, \$146,400. All to the United States. Silver in bars—United Kingdom, \$2,320. United States, \$1,979. Silver in bullion—United States, \$3,020; Germany, \$250. Silver and gold bullion, \$3,270—All to the United Kingdom.

Vegetable matter—Bananas—United States, \$1,283,946; United Kingdom, \$225. Coconuts—United States, \$151,339; United Kingdom, \$16,725. Coffee—United States, \$42,010; Germany, \$29,310; United Kingdom, \$1,504. India rubber—United States, \$52,738; Germany, \$5,556; United Kingdom, \$12. Sarsaparilla—United States, \$10,910; Germany, \$1,332.

Woods: Mahogany—United States, \$58,328; Central America, \$130. Other woods—United States, \$2,158; Central America, \$2,713; Germany, \$811.

Miscellaneous articles—United States, \$4,753; Germany, \$4,267; Central America, \$3,794; United Kingdom, \$1,914; other countries, \$8,288.

EXPORTS BY PORTS.

The exports by ports for the year 1911 were as follows:

	Pesos, silver.
Anapala.....	2,594,418.58
Puerto Cortes.....	2,106,184.56
La Ceiba.....	1,824,236.72
Trujillo.....	259,675.11
Roatan.....	371,924.06
Interior ports.....	405,377.75
Total.....	7,561,816.78



COMMERCE OF NICARAGUA

THE total foreign trade of Nicaragua for the year 1910, according to the report of Señor Don J. Augusto Florez Z., director general of statistics, published in March, 1911, amounted to \$7,401,380. The imports were \$2,856,305, and the exports \$4,545,075.

In 1909 the imports were \$2,583,257, and the exports \$3,989,428, or a total of \$6,572,685.

IMPORTS.

The value of imports by countries for the years 1908, 1909, and 1910 was:

Countries	1908	1909	1910
United States . . .	\$1,171,047	\$1,111,632	\$1,814,779
United Kingdom . . .	82,467	12,448	14,200
Germany . . .	14,774	29,448	8,888
France . . .	124,417	131,826	156,645.19
Italy . . .	7,567	109,307	66,833.74
Spain . . .		28,462	15,247.70
Sanctor . . .		7,820	5,450.20
Costa Rica . . .		1,626	2,118.20
Honduras . . .	1,263	3,902	4,438.00
Guatemala . . .		76	600.00
Colomb. (incl. Guayaquil) . . .	148,181	41,416	1,934.80
Other American countries . . .	1,978	6,266	1,717.69
Total (gold) . . .	2,938,878	2,583,257	2,856,305.43

There is no official publication as yet, except in the export office, of the details of imports and exports by articles. The following statements of these details are taken from the report of British Acting Consul General Venables on the trade of Nicaragua for the year 1910:

IMPORTS, BY ARTICLES.

Machinery . . .	\$98,417
Agricultural implements . . .	5,929
Machetes . . .	14,050
Tools, carpenters', blacksmiths', and engineer's . . .	9,452
Rice . . .	20,000
Flour . . .	211,000
Enameled ware . . .	6,697
Crockery . . .	10,498
Arms and revolvers . . .	5,492
Swords and daggers . . .	2,090
Beers . . .	20,451
Alcoholic liquors . . .	
Tobacco (leaf, cigars, and cigarettes) . . .	17,267
Zinc . . .	
Barbed wire . . .	11,154
Wire nails, tacks, and screws . . .	6,692
Mining materials . . .	62,451
Oils:	
Paint . . .	11,722
Industrial . . .	
Crude mineral . . .	4,068

Kerosene.....	\$90, 512
Gasoline.....	8, 614
Turpentine.....	2, 513
Mineral paints in powder.....	3, 217
Mixed paints.....	5, 599
Confectionery, sweets.....	4, 393
Jams and jellies.....	1, 438
Canned meats.....	15, 732
Canned fish.....	7, 110
Sardines.....	10, 325
Sauces and seasonings.....	1, 711
Boots, fine.....	33, 617
Brogans.....	15, 153
Boot-making materials:	
Fine leathers.....	50, 826
Other materials.....	3, 276
Blacking and paste.....	1, 127
Bedsteads:	
Plain.....	1, 856
Ornamented.....	1, 745
Furniture.....	5, 827
Soaps:	
Common washing.....	68, 638
Toilet.....	6, 867
Toilet waters.....	4, 034
Jute bags.....	38, 112
Alcohol.....	1, 157
Wines.....	23, 955
Bottled whiskies.....	15, 022
Barreled whiskies.....	5, 438
Textiles.....	480, 814
Textiles, manufactured.....	197, 675

The imports by articles and principal countries for the year 1910, according to Mr. Venable's report, were:

Machinery: United States, \$53,231; United Kingdom, \$39,060; Germany, \$5,117; Italy, \$773; and France, \$136.

Agricultural implements, such as axes, spades, shovels, hoes, etc.: United States, \$4,286; United Kingdom, \$1,210; and Germany, \$432.

Machetes: Germany, \$4,724; United States, \$4,549; United Kingdom, \$4,267; France, \$369; and Italy, \$141.

Tools, carpenters', blacksmiths', and engineers': United States, \$7,324; Germany, \$904; United Kingdom, \$661; France, \$496; and Italy, \$68.

Rice: United States, \$46,126; Germany, \$7,052; and United Kingdom, \$6,352.

Flour: All from the United States.

Enameled ware: Germany, \$4,986; United States, \$1,322; and United Kingdom, \$389.

Crockery: Germany, \$4,627; United Kingdom, \$2,639; United States, \$2,634; and France, \$598.

Arms and revolvers: United States, \$4,374; United Kingdom, \$884; and Germany, \$233.

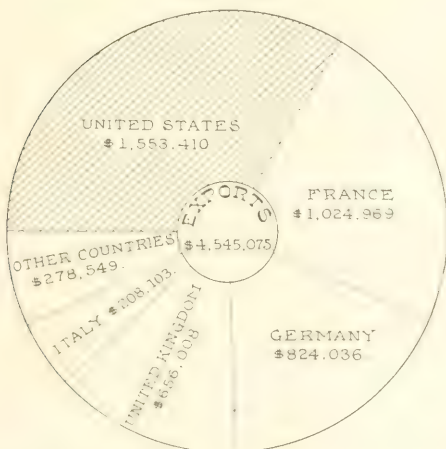
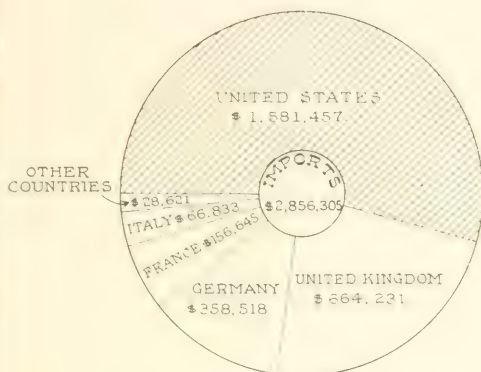
Swords and daggers: United Kingdom, \$2,090.

Beers: United States, \$11,946; Germany, \$6,838; United Kingdom, \$1,589; and France, \$77.

NICARAGUA

COMMERCE

\$ 7,401,380.



PAN AMERICAN UNION

Aerated waters: United Kingdom, \$4,539; Germany, \$1,064; United States, \$938; and France, \$816.

Tobacco (leaf, cigars, and cigarettes): United States, \$15,853; United Kingdom, \$65; and Germany, \$549.

Zinc roofing: United Kingdom, \$2,541; United States, \$2,022; and Germany, \$1,608.

Barbed wire: United States, \$9,827; and United Kingdom, \$1,326.

Wire nails, tacks, and screws: United States, \$4,685; Germany, \$1,044; and United Kingdom, \$962.

Mining materials: United States, \$58,495; and United Kingdom, \$3,956.

Paint oils: United States, \$4,374; Italy, \$3,533; Germany, \$2,192; United Kingdom, \$1,161; and France, \$461.

Lubricating oils: United States, \$5,992; and United Kingdom, \$1,054.

Crude mineral oils: All from the United States.

Kerosene: All from the United States.

Gasoline: United States, \$8,383; and Germany, \$223.

Turpentine: United States, \$2,332; and United Kingdom, \$136.

Mineral paints in powder: United States, \$1,910; Germany, \$884; and United Kingdom, \$423.

Mixed paints: United States, \$3,329; United Kingdom, \$1,292; and Germany, \$953.

Confectionery, etc.: United Kingdom, \$2,721; and United States, \$1,672.

Jams and jellies: United States, \$724; and United Kingdom, \$714.

Canned meats: United States, \$14,570; Germany, \$617; and United Kingdom, \$496.

Canned fish: United States, \$5,035; United Kingdom, \$967; Germany, \$782; and France, \$325.

Sardines: United Kingdom, \$5,103; United States, \$1,686; France, \$1,433; Germany, \$1,001; Spain, \$661; and Italy, \$340.

Sauces, etc.: United States, \$948; and United Kingdom, \$763.

Boots, fine: United States, \$30,764; Germany, \$2,551; and the United Kingdom, \$301.

Brogans: All from the United Kingdom.

Boot-making materials, fine leathers: United States, \$46,685; Germany, \$2,153; France, \$826; United Kingdom, \$821; and Italy, \$340. Other materials: United States, \$1,424; Germany, \$1,370; and France, \$481.

Blacking and paste: All from the United States.

Belsteads, plain: United States, \$1,001; United Kingdom, \$680; and Germany, \$175. Ornamented: United Kingdom, \$1,361; Germany, \$252; and United States, \$131.

Furniture: Germany, \$2,405; United States, \$2,400; and United Kingdom, \$1,020.

Soaps, common washing: United Kingdom, \$59,457; United States, \$9,180. Toilet: United States, \$3,450; United Kingdom, \$1,856; France, \$1,234; and Germany, \$325.

Toilet waters: France, \$2,984; Germany, \$486; United States, \$471; and United Kingdom, \$92.

Jute bags: United Kingdom, \$32,654; Germany, \$3,100; United States, \$1,725; and France, \$632.

Alcohol: All from the United States.

Wines: France, \$6,308; United States, \$5,137; Italy, \$4,986; Germany, \$3,917; United Kingdom, \$1,881; and Spain, \$1,725.

Whiskies, bottled: United States, \$10,998; United Kingdom, \$3,742; and Germany, \$282. Barreled: United States, \$5,025; and United Kingdom, \$413.

Textiles: United Kingdom, \$229,601; United States, \$164,020; France, \$34,112; Germany, \$29,082; Italy, \$20,339; and Spain, \$3,659.

Textiles, manufactured: United States, \$61,824; Germany, \$45,052; Italy, \$40,275; France, \$25,204; United Kingdom, \$23,080; and Spain, \$2,240.

The imports by customs-houses for the year 1910, were as follows:

Corinto.....	\$1,790,620.75
El Bluff.....	768,435.07
San Juan del Sur.....	254,985.55
El Cabo de Gracias a Dios.....	214,177.28
El Castillo.....	21,080.42
San Juan del Norte.....	7,046.96
Total.....	2,856,305.43

EXPORTS.

The value of exports by countries for the years 1908, 1909, and 1910, were:

Country.	1908.	1909.	1910.
United States.....	\$1,564,567	\$1,677,010	\$1,553,410.42
France.....	567,086	776,429	1,024,969.65
Germany.....	641,663	423,579	824,036.70
United Kingdom.....	592,814	843,454	656,008.63
Italy.....		44,196	208,103.33
Spain.....		1,837	11,746.00
Costa Rica.....		19,281	11,520.30
Honduras.....	227,871	81,167	10,985.65
San Salvador.....		39,395	8,334.40
Guatemala.....		1,430	5,220.20
Other European countries.....	76,145	55,374	211,685.00
Other American countries.....	37,864	23,263	19,055.37
Total.....	3,647,980	3,989,428	4,545,075.65

The export of coffee, by countries, for the years 1909 and 1910 were:

Country.	1909		1910	
	Kilos.	Value.	Kilos.	Value.
France.....	3,762,913	\$748,309.00	4,072,022	\$1,011,221.05
Germany.....	2,267,520	397,370.00	3,480,629	600,014.14
United Kingdom.....	1,392,861	246,157.00	1,859,427	419,044.30
Italy.....	193,758	35,226.00	908,191	200,748.40
United States.....	452,554	72,197.00	743,229	149,885.10
Spain.....	3,036	607.00	41,400	10,750.00
Honduras.....	141	28.00	11	2.75
Other European countries.....	366,285	55,374.00	923,607	210,285.00
Other American countries.....	8,255	1,651.00		
Total.....	8,441,323	1,556,919.00	12,028,516	2,795,151.25

The exports, by articles, as given in the report of the acting consul general for Great Britain for the year 1910 were:

Coffee:	
Clean.....	\$7,700.00
Husk.....	602,795
Black.....	45,339
Cotton.....	10,974
Cocoa.....	0.80
Hides.....	196,451
Deerskins.....	46,170
Rubber.....	346,182
Minerals:	
Amalgamated gold.....	329,362
Venide gold.....	51,224
Concentrated metals.....	

Minerals—Continued.

Gold in bars.....	\$279, 946
Smelted gold.....	175, 650
Precipitated gold.....	52, 940
Auriferous copper.....	97
Silver in bars.....	4, 189

Woods:

Cedar.....	11, 523
Mahogany.....	1, 516
Brazilwood.....	525
Lignum-vitæ.....	2, 916

Dyewoods:

Mora.....	24, 601
Nambar.....	14, 628
Genizaro.....	1, 934

Turtle shell..... 1, 093

Coconuts..... 608

Bananas..... 107, 357

Sugar..... 15, 212

Coffee, clean. France, \$1,005,203; Germany, \$519,855; United Kingdom, \$231,292; Italy, \$183,426; United States, \$92,874; Spain, \$10,352; and other European countries, \$107,755. Husk: Germany, \$267,849; United Kingdom, \$188,815; United States, \$39,852; France, \$3,514; and other European countries, \$102,764. Black: Italy, \$17,519; United States, \$17,321; Germany, \$6,371; France, \$3,669; and United Kingdom, \$428.

Cotton: Nearly all to the United Kingdom.

Cacao: Central American countries, \$10,536; Germany, \$6,561; United States, \$1,672; United Kingdom, \$1,502; and France, \$583.

Hides: United States, \$182,900; United Kingdom, \$10,046; Germany, \$3,329; and France, \$1,176.

Deerskins: All to the United States.

Rubber: United States, \$336,764; United Kingdom, \$5,613; and Germany, \$3,805.

Minerals: Amalgamated and cyanide gold: All to the United States. Concentrated metals: All to the United Kingdom. Gold in bars: United States, \$156,954; United Kingdom, \$122,992. Smelted gold: United States, \$141,533; United Kingdom, \$29,996; and France, \$4,034. Precipitated gold: United Kingdom, \$49,465; and United States, \$3,475. Auriferous copper: All to the United States. Silver in bars: All to the United Kingdom.

Woods, cedar: Germany, \$10,818; United States, \$705. Mahogany: France, \$807; United States, \$505; and Germany, \$204. Brazilwood: France, \$461; United Kingdom, \$63. Lignum-vitæ: United States, \$1,501; Germany, \$807; United Kingdom, \$118.

Dyewoods, mora: United States, \$21,073; France, \$3,489. Nambar: United States, \$12,403; France, \$1,215; Germany, \$875. Genizaro: All to the United States.

The total export of turtle shell, coconuts, and bananas went to the United States.

Sugar: Almost all to the Latin American countries.

The exports by customs houses for the year 1910 were as follows:

Corinto.....	\$3, 552, 065. 49
El Bluff.....	616, 006. 16
El Cabo de Gracias á Dios.....	267, 667. 66
San Juan del Sur.....	108, 448. 34
San Juan del Norte.....	888. 00
Total.....	4, 545, 075. 65

COMMERCE OF PERU FOR 1911.

THE total foreign trade of Peru for the year 1911, according to the message of President Leguia, presented to the Peruvian National Congress on July 28, 1912, amounted to 13,793,416 libras, of which 6,371,388 libras were imports and 7,422,028 libras were exports.

In 1910 the imports were 4,980,697 and the exports 7,074,076 libras, or a total of 12,054,773 libras. There was therefore an increase for the year 1911, as compared with the preceding year, of 1,390,691 libras in imports and 347,952 libras in exports, or a total gain in foreign trade of 1,738,643 libras.

Estimating the value of the libra at \$4.86 United States gold (the same as the British pound sterling) the value of the Peruvian foreign trade for the year 1911 would be: Imports, \$30,964,945.68; exports, \$36,071,056.08, or a total of \$67,036,001.76. On the same basis the figures for 1910 would be: Imports, \$24,206,188.24; exports, \$34,380,009.90, or a total of \$58,586,198.14. This shows an increase in trade of imports, \$6,758,757.44; exports, \$1,691,046.18, or a total increase of \$8,449,803.62.

There is no official publication as yet of the details of imports and exports for the year 1911, either in value or quantities. These details for the years 1909 and 1910 as given below are taken from the report dated October 1, 1911, of Señor Don Federico E. Ego-Aguirre, chief of the general statistical division of the customs.

IMPORTS.

The following table shows the imports by countries for the years 1909, 1910, and 1911:

COUNTRIES.	1909.	1910.	1911.
United Kingdom.....	\$7,619,983	\$8,178,489	\$8,458,486
United States.....	4,112,180	4,184,214	6,009,804
Germany.....	3,429,951	3,842,854	4,198,265
Belgium.....	1,201,996	1,217,896	1,664,174
France.....	936,516	2,361,492	1,496,414
Australia.....	572,821	855,259	1,114,427
Italy.....	732,466	814,461	969,628
China.....	98,392	21,417	8,702,960
Hongkong.....	444,828	629,066	
Spain.....	255,242	294,249	489,841
Chile.....	885,500	104,668	364,100
British India.....	154,738	144,966	186,000
Japan.....	42,060	22,409	144,400
Portugal.....	140,013	268,246	199,000
Cuba.....	13,317	36,406	27,000
Ecuador.....	166,155	199,787	61,000
Salvador.....	24,894	7,841	4,000
Brazil.....	83,603	17,649	4,000
Argentina.....	1,214	16,847	4,000
Colombia.....	3,888	16,464	
Other countries.....	51,513	96,467	100,000
Total.....	20,891,420	31,208,888	20,408,800

Includes Hongkong.

The figures for 1909 and 1910 as stated above are based upon the official report of the statistical division of the customs, those for 1911 are based on Sinopsis Estadística del Perú, 1908-1912, the total as given in the latter publication being £933,142, or \$4,535,070, less than the total as given in the message of President Leguía.

The imports by 21 major classifications for the year 1910 were:

Cotton textiles.....	£588, 031. 0. 07
Wool and animal hair.....	213, 387. 1. 12
Linen, hemp, jute, and other textile fibers.....	93, 740. 5. 65
Silk, animal and vegetable.....	61, 744. 0. 17
Hides, skins, and leather goods.....	34, 781. 4. 98
Wearing apparel and notions.....	167, 375. 8. 95
Furniture.....	31, 924. 0. 63
Metals, and manufactures of.....	449, 199. 7. 81
Stones, earthenware, glass and china ware.....	122, 091. 9. 29
Woods, lumber and manufactures.....	89, 852. 9. 51
Paints, dyes, varnishes, bitumen, gums.....	79, 762. 9. 45
Live animals.....	9, 310. 9. 17
Stationery, paper, and cardboard.....	66, 468. 8. 01
Tools, ships' stores, machines, and vehicles.....	183, 764. 8. 31
Musical instruments.....	7, 420. 0. 01
Arms, ammunition, and explosives.....	38, 154. 8. 72
Dry goods and miscellaneous articles.....	1, 739, 630. 6. 55
Beverages.....	115, 527. 0. 87
Comestibles and condiments.....	734, 464. 7. 35
Medicines and pharmaceutical products.....	113, 298. 5. 40
Articles not enumerated in the tariff.....	40, 764. 9. 66
Total.....	¹ 4, 980, 697. 1. 68
Value United States gold.....	\$24, 206, 184. 24

The imports by articles and countries for the year 1910 were as follows:

Cotton Textiles:	
United Kingdom.....	£363, 735. 3. 76
Germany.....	90, 142. 0. 23
Italy.....	46, 065. 2. 47
United States.....	30, 659. 1. 55
Belgium.....	27, 170. 8. 47
Spain.....	12, 496. 3. 73
France.....	12, 253. 2. 58
Japan.....	2, 463. 0. 96
Other countries.....	3, 045. 6. 32
Total.....	588, 031. 0. 07
Wool and animal hair:	
United Kingdom.....	109, 513. 0. 04
Germany.....	57, 036. 4. 72
Belgium.....	19, 054. 8. 57
Italy.....	12, 644. 0. 43
France.....	8, 662. 1. 58
Hongkong.....	3, 025. 4. 93
United States.....	514. 6. 84
Other countries.....	2, 936. 4. 01
Total.....	213, 387. 1. 12

This figure is read 4,980,697 libras or pounds, 1 sol and 68 centimos.

Linen, hemp, jute, and other textile fibers:

United Kingdom.....	£51,257.2.15
British India.....	18,282.2.80
Germany.....	4,410.3.25
Australia.....	4,045.0.60
Chile.....	3,354.2.80
France.....	3,306.6.99
Belgium.....	2,840.3.30
Italy.....	2,330.2.82
United States.....	1,055.0.99
Other countries.....	868.9.95
Total.....	93,740.5.65

Silk, animal and vegetable:

Germany.....	24,894.9.47
United Kingdom.....	13,076.0.26
France.....	11,943.3.99
Italy.....	4,837.1.87
Chile.....	2,236.5.79
Belgium.....	1,526.5.21
Other countries.....	3,229.3.58
Total.....	61,744.0.17

Hides, skins, and leather goods:

United Kingdom.....	12,117.4.51
Germany.....	8,369.9.66
United States.....	7,702.4.34
France.....	2,899.9.75
Other countries.....	3,691.6.72
Total.....	34,781.4.98

Wearing apparel and notions:

United Kingdom.....	53,212.6.02
France.....	25,577.8.96
Germany.....	24,411.7.91
Italy.....	22,346.4.06
United States.....	11,935.7.96
British India.....	11,478.6.00
Spain.....	9,218.1.92
Other countries.....	9,194.6.12
Total.....	167,375.8.95

Furniture:

Germany.....	11,009.2.61
United Kingdom.....	9,043.2.35
United States.....	8,266.0.72
France.....	2,223.3.94
Other countries.....	1,382.1.01
Total.....	31,924.0.63

Metals and manufactures of:

United Kingdom.....	261,124.5.79
United States.....	102,441.6.29
Germany.....	42,242.5.72

Metals and manufactures of—Continued.

Belgium.....	£33,944. 6. 48
France.....	7,565. 2. 43
Other countries.....	1,881. 1. 10
Total.....	449,199. 7. 81

Stones, earthen, coal, glass and china ware:

United Kingdom.....	55,913. 5. 03
Germany.....	29,353. 5. 38
Belgium.....	13,964. 7. 01
United States.....	10,670. 5. 43
Australia.....	5,531. 6. 26
France.....	3,119. 8. 65
Other countries.....	3,538. 1. 53
Total.....	122,091. 9. 29

Woods, lumber and manufactures:

United States.....	66,316. 4. 75
Chile.....	3,580. 6. 56
United Kingdom.....	3,562. 9. 44
Canada.....	3,400. 0. 00
Ecuador.....	3,300. 8. 11
Germany.....	3,120. 8. 63
Other countries.....	6,571. 2. 02
Total.....	89,852. 9. 51

Paints, dyes, varnishes, bitumen, gums:

United States.....	43,810. 5. 47
Germany.....	13,892. 9. 46
United Kingdom.....	12,823. 5. 56
Belgium.....	3,377. 2. 47
Salvador.....	3,285. 6. 00
Other countries.....	2,573. 0. 49
Total.....	79,762. 9. 45

Live animals:

Argentina.....	6,117. 5. 00
Chile.....	2,073. 4. 49
Other countries.....	1,119. 9. 68
Total.....	9,310. 9. 17

Stationery, paper, and cardboard:

Germany.....	31,763. 6. 25
United States.....	9,623. 9. 58
United Kingdom.....	7,332. 4. 40
Belgium.....	5,841. 6. 44
Spain.....	4,457. 6. 51
France.....	3,433. 1. 08
Italy.....	3,014. 0. 82
Other countries.....	1,002. 2. 93
Total.....	66,468. 8. 01

Tools, ships' stores, machines, and vehicles

United States.....	£89,748. 4. 11
United Kingdom.....	55,304. 7. 24
Germany.....	15,955. 2. 65
France.....	11,918. 5. 20
Belgium.....	7,333. 1. 53
Other countries.....	3,504. 7. 58
Total.....	183,764. 8. 31

Musical instruments:

Germany.....	4,107. 8. 83
United States.....	1,631. 9. 76
Other countries.....	1,680. 1. 42
Total.....	7,420. 0. 01

Arms, ammunition, and explosives:

United Kingdom.....	13,814. 8. 64
United States.....	8,082. 1. 51
Hongkong.....	5,550. 5. 40
Chile.....	4,704. 9. 40
Germany.....	3,562. 3. 38
Other countries.....	2,440. 0. 39
Total.....	38,154. 8. 72

Dry goods and miscellaneous articles:

United Kingdom.....	530,860. 3. 31
United States.....	370,279. 9. 66
France.....	307,310. 4. 71
Germany.....	306,288. 6. 02
Belgium.....	115,382. 3. 23
Chile.....	29,451. 1. 94
Italy.....	12,856. 1. 51
Ecuador.....	11,332. 2. 08
Hongkong.....	8,703. 6. 38
Spain.....	7,675. 6. 27
Cuba.....	7,269. 9. 43
Portugal.....	7,097. 4. 55
Australia.....	5,507. 8. 23
Other countries.....	19,614. 9. 23
Total.....	1,739,630. 6. 55

Beverages:

France.....	33,025. 1. 60
Germany.....	18,093. 0. 87
United Kingdom.....	16,927. 6. 77
Portugal.....	14,271. 4. 62
Italy.....	9,339. 7. 56
China.....	6,711. 4. 98
Spain.....	6,559. 1. 16
Belgium.....	5,160. 8. 30
United States.....	3,369. 0. 90
Other countries.....	2,069. 4. 11
Total.....	115,527. 0. 87

Comestibles and condiments:

Australia.....	£164,726. 9. 00
United States.....	112,495. 7. 78
Hongkong.....	104,264. 9. 47
Chile.....	102,282. 2. 24
United Kingdom.....	76,143. 9. 61
Germany.....	70,938. 3. 94
Italy.....	37,548. 5. 80
Portugal.....	11,539. 1. 68
Belgium.....	7,822. 7. 15
Argentina.....	3,560. 7. 48
Other countries.....	22,967. 5. 02
Total.....	734,464. 7. 35

Medicines and pharmaceutical products:

United Kingdom.....	29,707. 4. 77
Germany.....	26,990. 3. 48
United States.....	24,405. 2. 15
France.....	15,639. 1. 20
Italy.....	10,213. 4. 37
Other countries.....	6,342. 9. 43
Total.....	113,298. 5. 40

Articles not enumerated in the tariff:

United States.....	19,459. 9. 40
France.....	10,527. 3. 41
Other countries.....	10,777. 6. 85
Total.....	40,764. 9. 66

Imports by customs houses for years 1909 and 1910 were as follows:

Customs houses.	1909	1910
Callao.....	¹ £2,709,321. 6. 13	£2,977,580. 6. 05
Iquitos.....	482,013. 0. 61	903,708. 7. 29
Mollendo.....	473,914. 1. 01	467,066. 3. 43
Salaverry.....	182,565. 1. 47	192,212. 1. 07
Paita.....	135,342. 1. 26	171,357. 9. 78
Eten.....	110,344. 1. 95	126,220. 6. 66
Pisco.....	86,626. 3. 70	78,310. 6. 69
Pacasmayo.....	108,671. 6. 87	56,751. 4. 82
Ilo.....	8,306. 1. 45	4,168. 1. 09
Buena Vista.....	2,009. 1. 41	3,000. 4. 00
Madre de Dios.....	342. 9. 83	155. 2. 71
Puno.....	551. 6. 04	77. 7. 79
Tumbes.....	197. 8. 30	41. 7. 50
Ancomarca.....	72. 5. 74	15. 2. 80
Agency of customs house.....	348. 8. 70	
Total libras.....	4,298,627. 4. 47	4,980,697. 1. 68
United States (gold).....	\$20,934,413	\$24,206,188. 24

¹ These figures are read 2,709,321 libras, or pounds, 6 sols and 13 centimos.

EXPORTS.

The following tables show the exports by countries for the years 1909 and 1910

Countries.	1909	1910	1911
United Kingdom ..	\$12,988,746	\$12,244,119	\$11,987,771
United States ..	7,298,728	9,878,327	10,187,998
France ..	4,148,497	4,349,608	6,370,163
Germany ..	2,620,225	3,700,060	1,902,394
Belgium ..	1,704,449	1,740,893	2,811,486
Belgium ..	988,009	970,055	730,903
Spain ..	266,067	516,186	494,640
Spain ..	217,797	344,774	299,407
Argentina and La Plata, Chile ..	119,067	174,183	184,378
Panama ..	6,144	133,222	107,528
Portugal ..	260,343	76,282	248,093
Colombia ..	15,944	62,814	76,380
Canada ..	..	62,264	224,368
Argentina ..	38,790	10,070	..
Italy ..	4,179	5,485	1,411
Netherlands ..	70,826	2,962	71,148
Barbados ..	..	219	1,895
Santa Lucia (West Indies) ..	41,479	..	2,334
Japan ..	418,148	106	2,242
Other countries ..	234,711	5,990	298,943
Total ..	31,554,379	34,380,009	36,010,802

The figures for 1911 are given as contained in the report, dated December 7, 1912, of United States Vice Consul Louis G. Dreyfus, jr., Callao. The total as given by Mr. Dreyfus does not exactly agree, owing perhaps to a different figure of conversion, with the figure given in the opening paragraph.

The following table shows the exports of Peru, exclusive of minerals, for the years 1909 and 1910

Articles	1909	1910
Sugar ..	£1,148,458.3.54	£1,382,151.4.89
Rubber ..	1,137,657.8.68	1,278,673.7.85
Cotton ..	1,206,988.1.47	1,014,822.5.79
Wool, alpaca ..	255,688.1.35	265,757.0.44
Guano ..	155,224.5.72	181,582.2.00
Wool, sheep ..	97,941.0.27	145,386.4.90
Straw hats ..	93,828.5.20	121,078.0.54
Petroleum ..	147,497.3.68	109,615.2.23
Hides ..	73,820.0.77	90,744.9.39
Wool, llama ..	40,719.2.00	70,702.9.17
Cocaine ..	60,287.5.35	69,151.5.75
Rice ..	59,908.1.57	46,234.1.46
Goatskins ..	56,103.3.42	33,754.8.69
Cottonseed cake ..	23,013.6.30	27,157.0.19
Shirtings ..	..	26,064.8.72
Pepper ..	..	23,044.9.26
Coffee ..	16,087.2.45	23,228.6.64
Cotton seed ..	15,598.2.48	21,659.8.80
Cocoa ..	19,614.1.92	20,337.5.03
Alfalfa seed ..	..	18,851.2.29
Salt ..	3,261.2.80	12,956.5.70
Charcoal ..	7,035.1.70	10,682.0.80
Fruits, fresh and dried ..	6,189.0.84	9,548.2.41
Ivory nuts ..	..	9,325.9.00
Cattle ..	3,143.0.00	8,548.1.00
Alcohol ..	7,379.4.82	7,493.2.88
Chuño ..	..	7,434.8.91
Gasoline ..	3,240.5.49	7,408.2.34
Raw sugar (chancaca) ..	11,440.6.38	7,260.1.24
Cashmere ..	..	..
Horns of cattle ..	..	5,833.2.95
Chalons ..	..	4,829.7.34
Parchment ..	..	4,777.4.73
Bran ..	4,500.0.00	4,746.0.00
Vegetables and garden stuff ..	34,335.7.62	4,391.0.82
Rhatany root ..	..	4,171.5.10
Live animals ..	9,798.3.00	3,868.6.00
Onions ..	..	3,772.8.21
Tallow ..	..	3,232.2.82
Cacao ..	..	3,200.5.93

Articles.	1909	1910
Cottonseed oil.....	£2,469.2.75	£2,738.6.77
Yam.....	2,651.5.79	2,215.5.60
Butter.....	2,308.2.14	2,003.3.34
Olives.....		1,976.6.02
Wheat flour.....	202.7.93	1,840.1.51
Honey.....	1,305.6.85	1,550.7.05
Wines.....	7,136.2.13	1,304.9.25
Beeswax.....	1,043.9.94	1,288.3.38
Indian corn.....	76.7.24	1,224.6.39
Horsehair.....	1,128.2.53	1,094.0.00
Barley.....		1,044.6.14
Meats.....	8,275.6.35	
Cotton textiles.....	36,850.5.81	
All other exports.....	57,010.2.94	30,946.9.24
Total.....	4,829,246.6.19	5,151,616.2.60

The following table shows the exports of minerals for the years 1909 and 1910:

	1909	1910
Silver and copper bar.....		£635,852.3.31
Copper and silver bars.....		609,841.6.28
Copper and silver matte.....	£164,761.9.76	130,915.3.90
Copper and silver ore.....		123,698.1.30
Silver sulphide.....	73,401.2.81	92,083.1.68
Vanadium.....	69,962.8.40	91,911.2.60
Borate of lime.....	73,318.2.08	73,169.9.12
Silver and lead ore.....	13,647.5.41	37,516.7.47
Silver bars.....	47,516.0.26	32,148.1.26
Copper ore.....	63,218.8.70	29,749.4.48
Silver ore.....	50,390.1.28	24,477.7.35
Copper matte.....	15,439.3.66	10,348.4.70
Copper, lead, and silver matte.....		5,591.3.73
Copper, old.....	4,005.4.50	4,732.4.72
Lead ore.....	3,553.9.45	3,976.0.85
Silver and copper sulphide.....	1,703.6.82	3,311.2.96
Gold, silver, and copper ore.....	482.5.14	3,051.0.04
Silver and copper ore.....	60,769.4.01	
Copper bars.....	967,830.4.95	
All other.....	52,332.3.78	19,084.6.76
Total.....	1,663,424.1.01	1,922,459.8.51

The export of minerals by countries, for the years 1909 and 1910, was as follows:

	1909	1910
United States.....	£1,075,905.8.40	£1,406,663.5.93
United Kingdom.....	462,046.9.57	388,792.9.40
Germany.....	107,148.2.02	102,194.9.10
Belgium.....	247.3.16	18,435.7.41
France.....	1,505.5.28	2,702.6.17
Other countries.....	16,490.2.58	3,670.0.50
Total.....	1,663,424.1.01	1,922,459.8.51

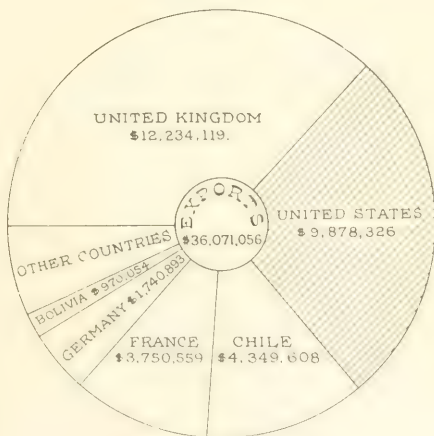
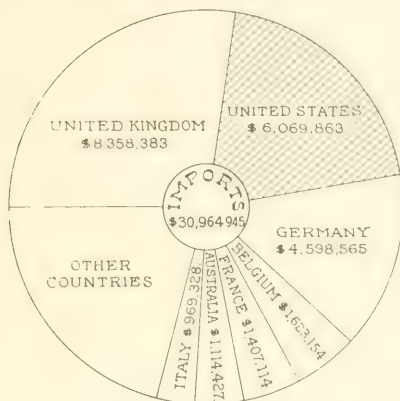
According to the message of President Leguía, referred to above, the mineral exports in 1911 amounted to £2,045,022.7.18.

In 1910 there were exported of: Silver and copper bars: To the United States, 635,678.7.16 libras; to the United Kingdom, 173.6.15 libras. Copper and silver bars: All to the United States. Copper and silver matte: To the United States, 15,468.4.03 libras; to the United Kingdom, 114,741.9.57 libras; and to Germany, 705.0.30 libras. Copper and silver ore: To Germany, 3,013.9.70 libras; to Belgium, 1,326.3.30 libras; to the United States, 39,671.4.86 libras; to France, 13.7.02 libras; and to the United Kingdom, 79,642.6.38 libras. Silver sulphide: To Germany, 33,267.7.51 libras; to the United States, 6,541.0.41 libras; and to the United Kingdom, 52,274.3.76 libras. Vanadium: All to the United States. Borate of lime: To Germany, 46,027.7.44 libras; and to

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the United Kingdom, 27,142.1.68 libras. Silver and lead ore: To Germany, 7,430.8.46 libras; to Belgium, 16,661.9.28 libras; and to the United Kingdom, 13,421.6.48 libras. Silver bars: To Germany, 224.6.63 libras; and to the United Kingdom, 31,923.4.63 libras. Copper ore: To Germany, 3,448.8.55 libras; to the United States, 7,354.4.80 libras; to France, 2,366.7.03 libras; and to the United Kingdom, 16,480.0.10 libras. Silver ore: To Germany, 1,110.2.54 libras; to the United States, 5,278.5.07 libras; and to the United Kingdom, 18,088.9.74 libras. Copper matte: To Germany, 18.9.75 libras; to the United States, 2,615.6.34 libras; and to the United Kingdom, 7,713.8.61 libras. Copper, lead, and silver matte: All to the United Kingdom. Copper, old: To the United Kingdom, 4,075.4.50 libras. Lead ore: To Germany, 2,176.9.00 libras; and to the United Kingdom, 1,351.7.02 libras. Silver and copper sulphide: To Germany, 1,040.3.82 libras; and to the United Kingdom, 2,270.9.14 libras. Gold, silver, and copper ore: To Germany, 601.0.97 libras; and to the United States, 60.8.20 libras.

The exports by customhouses for the years 1909 and 1910 were as follows:

Customhouses.	1909	1910
Callao.....	¹ £2,615,825.1.54	£2,894,941.4.40
Iquitos.....	1,029,708.7.75	1,121,501.3.93
Salaverry.....	627,022.0.99	834,228.0.70
Mollendo.....	623,151.0.57	765,727.0.78
Putis.....	465,142.3.83	529,295.1.92
Eten.....	307,927.8.98	367,127.5.03
Pisco.....	371,546.5.71	266,387.1.73
Agency of customhouse.....	122,239.8.78	132,650.1.94
Pacasmayo.....	51,159.7.39	63,877.6.48
Puno.....	51,382.6.94	30,539.4.71
Ancumarea.....	10,380.6.74	17,066.0.32
Tumbes.....	157,458.5.18	14,625.4.56
Ilo.....	6,069.7.27	12,388.9.39
Buena Vista.....	12,930.6.93	12,242.8.92
Madre de Dios.....	40,724.8.60	11,477.6.30
Total libras.....	6,492,670.7.20	7,074,076.1.11
United States (gold).....	\$31,554,379	\$34,380,009.90

¹ This figure is read 2,615,825 libras or pounds, 1 sol, and 54 centimos.



ARGENTINE REPUBLIC

During the first 10 months of 1912 the EXPORTS of domestic products from the Argentine Republic aggregated 9,158,400 tons, as compared with 4,110,386 tons in the same period of 1911. The largest single items of exports, in tons, were, in the order of their importance, as follows: Corn, 3,779,965; wheat, 2,438,520; oats, 869,280; flax, 457,223; and frozen beef, 263,844. The minister of agriculture of the Argentine Republic has decided, after visiting the IGUAZU FALLS, to detail a sufficient corps of engineers to superintend the opening of new roads and the repair of old ones in the vicinity of the cataracts, and to erect several houses at convenient points to be leased as hotels for the accommodation of tourists. The department of agriculture is also improving the great national park of which the Argentine side of these falls forms a part. — The Congress of the Argentine Republic has been requested by the department of agriculture to make an appropriation of 200,000 pesos for the purpose of defraying the preliminary expenses necessary to be incurred in connection with the collection, arrangement, and display of the Argentine exhibit at the PANAMA PACIFIC INTERNATIONAL EXPOSITION to be held in San Francisco, California, in 1915. Argentina proposes to make a fine exhibit of its products, and will appoint a special committee to take charge of the work. — The DAIRY SCHOOL of the Argentine Government at Belle Ville, Argentina, is one of the best equipped and managed institutions in South America. Thorough instruction is given in the manufacture of butter, cheese, and other operations connected with the successful running of a dairy. A fine laboratory has been fitted up and special attention is given to laboratory work. The agricultural section gives instruction in food products, grazing, and forestry with a special view to their use in the dairying business. — The Argentine consul in Genoa has informed his Government that the STEAMER *Sala Giordani* of the Sicula American Co., which formerly navigated between Naples and the United States, has sailed for Buenos Aires, and that if the trial trip is satisfactory to the company this steamer will be used regularly in the South American service. — A shipment of 176 head of CATTLE was recently made from Buenos Aires to Bermuda, Argentine stock having been preferred to cattle from the United States. — A correspondent of the STANDARD of Buenos Aires, who recently visited southern Argentina, reports that there is a good opening for a BANK at Patagones, on the Negro River, or at Viedma, a town of 3,000 inhabitants and capital of the province of Rio Negro. — Patagones is to be the terminus of the Pacific Railway line. — Tres Arroyos, near Bahia Blanca, has contracted for the PAVING of 25 squares of streets at 13.30 pesos per meter for granite

and 22 pesos per meter for asphalt. —The National Government has approved a plan for the construction of a HOSPITAL at Allen, a few leagues from Neuquen. The building will cost approximately 385,000 pesos. —IMMIGRANTS to the number of 1,400 arrived at the port of Bahia Blanca on the steamer *Santa Fe* on November 7, 1912. —The municipal THEATER at Mendoza is to be leased for one year from February 1, 1913. The present lessee is Juan Iglesias. The national school of VITICULTURE at Mendoza is to be visited by a technical inspector who will recommend to the Federal Government the manner of enlarging the institution and improving the management and efficiency of the school. —From the 31st of the present month the GRANARIES which the railway companies have at their stations are to be opened to public service with tariffs fixed by the executive power. The Argentine Northeastern RAILWAY has been granted 12 months from January 10, 1913, in which to complete the first 100 kilometers of its extension from Concordia to Concepcion del Uruguay. —A contract has been made with the South American Bank Note Co. to print the registers of the numbers of the BONDS of the 70,000,000 gold loan negotiated in 1911. —The division of commerce and industry of the department of agriculture will exhibit specimens of all the INDUSTRIAL PRODUCTS of the country. The Argentine Industrial Union has been requested to cooperate in the formation of the exhibit. —The department of education will engage in Europe, through the legations at Berlin and Paris, PROFESSORS of philosophy, history, and French for service in the National Institute at Buenos Aires after March, 1913. —Sr. Huergo, chief engineer of the Argentine Government in connection with the Comodoro Rivadavia oil exploitation estimates that the oil fields at that place cover an area of 200 hectares, on which 100 wells could be sunk. The money needed for continuing the exploitation is, approximately 5,000,000 pesos. The Comodoro Rivadavia oil fields are especially valuable to Argentina since up to the present time no workable bed of good coal has been discovered in the Republic. —Juan Galargo, an engineer commissioned by the department of agriculture to inspect the IRRIGATION works along the banks of the Rio Negro, reports a great extension of cultivation within the irrigated area and unusual activity in the cultivation of the vine. —A company has been formed entitled "Credito de Irrigacion de Mendoza" (Mendoza Irrigation Credit Co.) to operate in the San Rafael district. The company proposes to use the waters of the Diamanto and Atuel Rivers for irrigating a large area of land. —The value of the transfers of REAL PROPERTY in Buenos Aires during the first nine months of 1912 was 237,111,296 pesos paper, as compared with 288,605,306 pesos during the same period of 1911. The mortgages placed on real estate during the period referred to aggregated 164,865,910 pesos paper, in 1912, as compared with 147,967,680 pesos paper in 1911. —From January to September, inclusive, 1912, there

were 10,310 MARRIAGES in the City of Buenos Aires. The Central Argentine Railway has issued its railway MAP of the Argentine Republic for 1912. A contract was signed on November 5, 1912, by the department of public works, with Vickers Son & Maxim for the construction of a SHIPBUILDING YARD and maritime workshops on the Segundo River near La Plata. The National Government proposes to invest 2,500,000 gold pesos in the company that is to be formed for the establishment of the works. The first vessel to arrive at Buenos Aires using refined PETROLEUM as a fuel was the *Monte Pendo* of the Hamburg American Line. Some of the Government engineers composing the committee of administration for the exploitation of the petroleum deposits of Comodoro Rivadavia visited and inspected the vessel. The 700 tons of petroleum stored in the ship for use on the journey from Hamburg to Buenos Aires and return were loaded in four hours. The results were satisfactory in every respect, and especially as to cleanliness and absence of smoke. The unrefined petroleum used in the locomotives on the railway in course of construction from Comodoro Rivadavia to Lake Buenos Aires could not be used in the crude state on petroleum steamers. The bill presented to the Chamber of Deputies providing for the PENSIONING of railway employees is based on a 5 per cent deduction from salaries exceeding 100 paper pesos per month, the Federal Government paying into the pension fund 5 per cent on all salaries of 100 paper pesos per month or less. Under the plan proposed the Federal Government is to contribute 10,000,000 paper pesos to the pension fund as a guarantee that there will always be sufficient money on hand to pay all pensions falling due. Mr. R. J. Coelho, director general of the Spanish Bank of the River Plate in Buenos Aires and an acknowledged authority on the FINANCIAL AND ECONOMIC CONDITION of the Argentine Republic, stated in an interview in Paris recently that the impression in Europe concerning the Argentine Republic is one of admiration for its economic progress in so short a lapse of time, made possible by the unlimited agricultural and pastoral resources of the country. Concerning the great increase in the price of land in Argentina, Mr. Coelho made a comparison of the value of land in Canada with that of the Argentine provinces of Cordoba, Santa Fe, Entre Rios, Corrientes, Tucuman, and Mendoza, which are more densely populated than that part of Canada now offering for sale large quantities of untitled agricultural land, and found that the value of Argentine land in the provinces referred to is about half of that asked for the cheap lands of Canada. Mr. Coelho believes that the policy of the Argentine Government should be to enter into commercial treaties with other nations for the purpose of developing not only the commerce of the country but also its latent resources.

BOLIVIA

Sr. Don Alberto Decombe, an inspection engineer of the Arica to La Paz RAILWAY, made a trip in November last over the line, and reports that the work still to be done will require an outlay of about £35,000. The railway is completed from Arica, Chile, to Viacha, Peru, and grading is being done from Viacha to Altos de La Paz, a distance of 23 kilometers. From Altos de La Paz to the City of La Paz the distance of the route selected is 12 kilometers, and the difference in altitude between the two places 453 meters. Of the four machine shops which the railway will have at Chinchorro, Viacha, Puquios, and Central, the first two are nearly completed and installation work has begun on the other two. These shops will be fitted up with the best modern machinery and will be able to turn out all kinds of work. There is a steep grade in the road from kilometer 40 (from Arica) to Central Station, kilometer 70, at which point an elevation of 1,440 meters is attained. The cog-wheel section of the railway begins at Central station and extends over a distance of 35 kilometers to Puquios, a station situated 3,730 meters above the level of the sea. The grade continues to ascend to Laguna Blanca, 190 kilometers from Arica, where an elevation of 4,250 meters is reached. Laguna Blanca is the station where it is proposed to construct irrigation works for irrigating the Tacna Valley. The Bolivian frontier is at kilometer 208. A branch line is being constructed under a guarantee of the Bolivian Government from Corocoro station to the village of the same name. At Viacha, kilometer 415, the elevation is 3,900 meters. At this point the Arica Railway connects with the Antofagasta to Oruro and La Paz Railway, and the railway from Mollendo to La Paz, via Lake Titicaca and Guaquí. The newspaper entitled "El Ferrocarril" (The Railway) of Cochabamba, Bolivia, states that the project of a North American company for constructing a RAILWAY through Brazil from a point on the Atlantic Ocean near Rio de Janeiro so as to connect with the railways which communicate with the ports of Antofagasta, Arica, and Mollendo on the Pacific Ocean is rapidly assuming shape and that indications are that the plan will soon become a reality. Steps have been taken to purchase all the interests and concessions of the Governments of Bolivia and Chile in the La Paz to Antofagasta Railway, the approximate consideration being £15,000,000. A committee of three persons appointed to carry on the negotiations recently disembarked at Buenos Aires, proceeded overland to the Bolivian frontier and from thence to La Paz. This committee made a thorough inspection of the Antofagasta

Railway in December last and will report upon the same to the company. Should the negotiations be successful the new company will proceed at once with the construction of the 3,000 kilometers of railway from the Brazilian coast to the City of La Paz, commencing work simultaneously at convenient points along the line. — The Bolivian Congress has passed a law imposing import duties of 17.40 bolivianos on each 100 kilos of raw sugar and molasses, and 6.50 bolivianos on each 100 kilos of refined sugars, white and brown. — The CUSTOMHOUSE at Guaqui was transferred to La Paz on December 1, 1912. The Bolivian press also recommends the immediate transfer of the customhouse at Antofagasta to Uyuni, and of the customhouse at Quilaca to Tupiza in accordance with a law recently passed by the Bolivian Congress. — TELEGRAPH offices at Villa Aspiazu and Yanacachi in the province of Sud Yungas have been opened to public traffic. The Government of Bolivia has required the Bolivian Railway Co. to establish an ACCOUNTING OFFICE at La Paz for the fiscal verification of the expenses of construction of the Speyer railways. — During the latter part of 1912 the Congress of Bolivia approved the following INTERNATIONAL CONVENTIONS and agreements: Treaty of amity, exchange of publications, and postal convention with Colombia; agreement made at the congress held in Caracas between Ecuador, Bolivia, Peru, Colombia, and Venezuela concerning telegraphs, academic titles, literary and artistic property, ways of communication, execution of foreign laws, patents, privileges, inventions, extradition, publications of the unprinted documents of the Liberator, etc.; treaty of commerce with Belgium, and postal money order convention with Great Britain. The President of Bolivia has been authorized by the Bolivian Congress to contract a loan of 760,000 bolivianos for the erection of military BARRACKS AND HOSPITALS, and the sum of 500,000 bolivianos has been appropriated for the acquirement of military supplies and dirigible balloons. — The National Light and Power Co. of Cochabamba has submitted a bid for the extension of the Vinto RAILWAY to Arani and Totora with branches to other points. — The Bolivian Goldfields Co., a North American enterprise, has bought the Chuquiguillo MINE, with the intention of exploiting it on a large scale. American mining engineers are investigating mining properties at Potosi and other mining centers of the Republic with the intention of developing same on a large scale. — Sr. Alfredo Jauregui Rosquellas has published an interesting BOOK of 128 pages on the historical notes and statistics of the capital of the Republic. — The WATERWORKS board at Cajamarca has negotiated a loan of 50,000 bolivianos with the National Bank of Bolivia for the construction of waterworks at that place. — A circular has been issued from Antofagasta to merchant

of Bolivia stating that in view of greater expenses because of an increase in the amount of paper and stamps required for CUSTOMS DOCUMENTATION, in future an additional charge of 20 pesos, Chilean currency, will be included in the charges for dispatching goods through the customhouse. — The first scholastic year of the COCHABAMBA INSTITUTE, known locally as the American School, has been very successful. The teaching force of 18 professors, under the able direction of Prof. J. E. Washburg, gave instruction to 250 students during the year referred to, 70 of whom were boarding pupils. The Government of Bolivia pays the expenses of 40 boarding pupils, selected by competitive examination for entrance to this school. — Maj. Eugenio Garay, the new MINISTER of Paraguay in Bolivia, presented his credentials to the Bolivian Government on November 26, 1912. — The officers of the Cochabamba LIGHT AND POWER Company are as follows: Simon Lopez, president; Rafael Urquidi, manager, and Felix A. delGranado, secretary. The executive power has ordered the survey by Government engineers of a WAGON ROAD from Cochabamba to Morochata and Independencia. — The House of Deputies has passed a MINING law prohibiting the sale of ores and metals by miners who obtain same illegitimately. The seller of stolen ores and the purchaser of same knowing them to be stolen are liable to severe punishment. — Sr. Don Adolfo Ballivian, consul general of Bolivia in New York, reports that during the month of December, 1912, 12,436 packages of merchandise weighing 575,949 kilos were shipped from the port of New York consigned to Bolivian points. This merchandise, which consisted chiefly of hardware, cotton goods, machinery, kerosene, groceries, liquors, and miscellaneous articles, was invoiced at \$141,880.47.



The new year opens with general business activity in Brazil. Four NEW VESSELS of the North German Lloyd are to ply between Europe and the River Plate country, calling inward and outward at Brazilian ports. The first sailing was from Bremen on January 4. These ships will be 9,000 tons each and will have accommodation for 120 first-class passengers, 80 second class, and 1,300 third class. — The Anglo-Brazilian Meat Co. has been authorized to operate in the Republic. The object is to acquire and establish meat and SLAUGHTER HOUSES in Santa Theresa and Industrial in Bage. Rio Gran do Sul, and to engage in agriculture, real estate, and allied lines in Brazil. The capital named is \$700,000 and the head office

of the company is in London. At the annual meeting of the stockholders of the Carlton Hotel Co. (Ltd.), London, the prospects of increased hotel business in Brazil were deemed especially bright. HOTELS are projected in Sao Paulo, Guarujá, and other places, in addition to the business already established in the Brazilian capital. Commenting on the subject, Mr. Ham, one of the company officials, said that the two hotels which are projected at Rio and Sao Paulo will probably be the finest buildings ever erected in those cities, and that there seems to be every indication that Brazil is about to develop enormously. The Brazilian Review in speaking of the NEW STEAMSHIPS recently put into service between England and Brazil says that the new ships are proving most popular, especially for those who desire a quiet voyage without a crowd. Some years ago this service was only available occasionally but under present arrangements the sailings are fortnightly.—Mr. W. Alison Phillips, of the editorial staff of the London Times, will soon become EDITOR of the South American supplement of that paper. Mr. Phillips recently completed a circuit of the continent, during which he made extensive studies of commercial and industrial conditions which will be a valuable asset when he assumes his new duties. For eight years he was one of the editors of the Encyclopedia Britannica.—INCREASED BUSINESS is the cause given by the Paulista Railway Co. for ordering 12 new locomotives and 250 steel freight cars. The value of the order is estimated at about £133,335.—The newspapers report that the President of Brazil has signed a decree authorizing the extension of the Rio de Janeiro PORT WORKS, an improvement that will give still greater facilities for shipping interests. The improvements of Beira Mar along the Rua Sta. Luzia are progressing, and when completed will enhance the beauty of this already celebrated water front.—At the end of November the STOCK OF RUBBER at Para was 1,725 tons, and at Manaus 360 tons, or a total of 2,085 tons; this amount is about 1,100 tons less than on the corresponding date last year.—The one hundred and sixth ordinary general meeting of the STOCKHOLDERS of the Sao Paulo Railway Co. (Ltd.), was held in London late in October. The chairman presented a very interesting report, which was published in the Brazilian Review of November 26, 1912.—A call for tenders for supplying material for the erection of 1,500 kilometers of WIRE FENCING along the various lines of the West Minas Railway were received up to December 30.—The Middleton Car Co., of Pittsburgh, Pennsylvania, has been authorized to operate in Brazil. The object is to manufacture and sell IRON AND STEEL, build and sell cars and other rolling stock, etc.—The Brazilian Review, of Rio de Janeiro, states that the VOLUME OF PARCELS arriving by post is increasing. The customs revenue therefrom in October was

\$33,000 against \$13,000 for the same month last year.---During October the REVENUE TAX in the Federal district amounted to \$135,000, or an increase of \$11,000 over the same month last year, while the revenue from perfumes and scents included in the above figures was \$13,000, or an increase of \$7,000, a remarkable showing. -- The President has signed a decree authorizing the Minas Geraes & Espiritu Santo Exploration Co., with a capital of \$650,000, to do business in the Republic. The concern will OPERATE SAW-MILLS, mines, railway lines, deal in lands, etc.--- News from London states that an important group of capitalists recently sent an expert to study several RUBBER SECTIONS of the world, and that he visited Brazil and reported that three reforms are urgently needed, viz: Change of incision method, importation of Chinese labor, and reduction of export duties. --The NEW DRAINAGE system of Para has been inaugurated, much to the benefit of the city. The concessionaires are the Para Municipality Improvements Co. (Ltd.). ---- The State of Minas has given land for the establishment of a model BREEDING FARM, which will be started at Uberaba, and the President of the Republic has signed the decree of authorization. -- The Brazilian Review of November 19 states that a RADIO-TELEGRAPHIC STATION has been established at Stanley in the Falkland Islands, thus bringing into wireless communication one of the remote sections of the world. The governor of the islands has asked, through the British consul in Rio Grande do Sul, that the station at Stanley and Junceao be kept in continuous connection in order that experiments may be made, etc.---The report of the North Brazil SUGAR FACTORIES states that the accounts of the year to June 30, after providing for interest on debentures and transferring £2,000 to debenture reserve account show a profit and loss account of £3,206, as against a debit balance of £530 for the previous year. -- Five of the larger COTTON MILLS in the Federal district, according to the United States Consular Reports, employ 8,000 operatives and have an output of 75,500,000 meters (meter equal to 1.09 yards). Another large mill under construction will employ 1,500 operatives and will utilize 1,500 horsepower. Four mills in Petropolis manufactured 17,000,000 meters, and in Sao Paulo 24 mills produced 76,000,000 meters in 1910.---During 1911, 375 foreign SAILING VESSELS arrived at Brazilian ports, an increase of 15 vessels over 1910. It is reported that the Brazilian Government has made an arrangement with the States of Para and Amazonas whereby the export DUTY ON RUBBER will be reduced, beginning on January 1, 1913. It is proposed to make up for the loss in revenue through such reduction by imposing a tax on business concerns and a tax on the consumption of alcohol.---The MUSICAL HOUSES of Para handle almost exclusively, among other

instruments, the North American phonograph, which is gaining in popularity. Certain types are established but new styles of machines well handled would doubtless soon become popular.——The Bureau of Statistics, of the United States Department of Commerce and Labor, has recently made public a statement relative to **COFFEE PRODUCTION** in 1911. Brazil was the world's largest producer, that country's crop for the year being given at 1,189,437,000 pounds; barring 1904 and 1910, this crop was the smallest turned out in 11 years. The Brazilian record was made in 1909, when the crop was 2,232,911,000 pounds. The second largest producer in 1911 was Venezuela, with a crop that aggregated 81,911,000 pounds. The coffee production of other leading countries for 1911 was as follows: Dutch East Indies, 49,001,000 pounds; Mexico, 41,587,000 pounds; Porto Rico, 33,933,000 pounds; British India, 30,492,000 pounds.——**MOVING PICTURES** are very popular in Brazilian cities. Rio de Janeiro alone has seating capacity for 13,000 persons, with an intake of more than \$3,000 per hour. Other cities, such as Sao Paulo, Santos, Pernambuco, Bahia, etc., have many places for such amusements and the attendance is usually good. Western scenes and sketches as portrayed by American film manufacturers are not popular, the French features being more appealing.

CHILE

The National Mining Society has been commissioned to study the **PETROLEUM** deposits at Ancud and Carelmapu. The Chilean Government has been invited to participate in the **SMELTING** congress to be held in London in May, 1913. The bureau of mines has compiled data showing the extent of the **IRON** ore districts of the Republic to be as follows: Cerro Gordo mines, in Mejillones, 9,000 square meters; Chuquicamata mines, in Calama, 16,000 square meters; Chillate mines, in Antofagasta, 180,000 square meters; Chañar Quemada mines, in Freirina, 100,000 square meters; Los Cristales mines, near the Longitudinal Railway, estimated to contain 30,000,000 tons; Los Barros mines, near Los Cristales mines, 1,000,000 tons; Sierra Piríña mines, on the Longitudinal Railway, 200,000 tons; and mines at Coquimbo, over 970,000,000 tons.——An appropriation of **₧500,000** has been made to the Central Railway system for the purchase of **SLEEPERS**.——The cost of the construction of a **RAILWAY** from Port San Antonio to Cartagena is estimated at **₧565,736**.

The Puente Alto to Melocoton **RAILWAY** has been opened to public traffic, and a third rail has been laid on the railway between Copiapo and Chilo. The sum of **₧120,000** is to be

spent in dredging the port of Carahue. The department of industry will expend ₧100,000 in improving the Renca, Nuñoa, and Viña del Mar to Concepcion HIGHWAYS. Steps have been taken to provide POTABLE WATER for the towns of Traigen, San Felipe, and Los Andes. The approved budget of the potable WATER company of Valparaiso for 1913 is ₧2,320,000. Roberto Fortune has been appointed VICE CONSUL ad honorem of the Republic of Panama at Coquimbo, Chile. The Braun & Blanchard Steamship Co. has added an ADDITIONAL VESSEL to its service between Valparaiso and Puntarenas. Steps have been taken to organize in Santiago the Chilean ENAMELING Co., with Luis Urzua Vicuña as general manager. The invoice value and duties paid on enameled ware imported into Chile annually is approximately ₧21,000,000. All of the raw materials for the manufacture of enameled articles are to be found in the Republic of Chile in large quantities. It is proposed to erect a factory with a capacity of 25,000 enameled articles daily, and which will give employment to more than 1,000 workmen.—Lecomte & Co. have established a GLASS factory at Concepcion, Chile. A specialty is to be made of the manufacture of bottles, flasks, etc., for the druggist trade.—The National Congress has been asked for an appropriation of ₧300,000 to enable the executive power to continue the study of the BRANCH LINES of railway necessary to be built to Iquique, Antofagasta, and Mejillones as feeders to the Longitudinal Railway.—The bureau of railways has recommended the standardizing of the GAUGE of the Longitudinal Railway to 1 meter. The maximum grades on this line are 4.5 per cent.—The inspector general of forests reports that the wooded section of Chile does not exceed 5 per cent, when it should be at least 33 per cent, and recommends that Congress take the necessary legislative action for the CONSERVATION of the forests of the country.

The Government of Chile has appointed an ad honorem delegate to participate in the Tenth International Congress of AGRICULTURE to be held in Ghent from the 8th to the 13th of June, 1913. A commissioner of the International Institute of Rome is traveling in Chile, with the view to establishing the COOPERATIVE AGRICULTURAL system in that Republic. The department of industry has asked for an appropriation of ₧100,000 for the installation of a geodetic SCHOOL. The TRANSANDINE RAILWAY via Ñuble will have a gauge of 1.68 meters, and will run from San Fabian to Guacalafque, on the Argentine frontier, a distance of 73.2 kilometers. From the Argentine boundary the railway will be extended through Pampa Tril to General Acha, where it will connect with the Argentine railways. The maximum grade is 3 per cent, and the maximum altitude 1,588 meters. The distance between Santiago and Buenos Aires via this route is 1,852 kilometers. The estimated

cost of the Chilean section is P12,869,600 gold. The bureau of public works of the Chilean Government has recommended to the department of industry the advisability of supplying Caldera with potable WATER. The estimated cost for the installation of water works at that place is P18,500. The plan submitted by Sr. José Mucho for the installation of an ELECTRIC light and power plant in the city of Ancud has been approved by the Chilean authorities.—The WHARF which an English firm of contractors is to construct at Las Salinas, port of Valparaiso, will be 200 meters long and wide enough to accommodate three 1.68-meter railway tracks to be used in transporting materials. The finance committee of the House of Deputies has reported favorably on a petition of the manufacturers of wooden phosphorus MATCHES requesting an increase of duty on the imports of same to 18 gold centavos per gross kilogram.—At the special session of the Chilean Congress held in the latter part of 1912 the council of state submitted the following important BILLS: A bill authorizing the President to auction the land on which the men's lyceum at Talca is situated; a bill providing that nitrate properties and lands be subject to attachment and alienation in accordance with executive decrees; and a bill establishing a corps of mining engineers and a geologic institute. The National Agricultural Society has been petitioned to divide the Republic into two zones for the purpose of registering PATENTS and BRANDING marks for animals, the northern zone to be under the direction of the National Agricultural Society and the zone comprising Maule and the South under the direction of the Agricultural Society of the South.—Rules and regulations have been issued permitting private parties to use RAFTS, without obtaining licenses, for transporting timber and other merchandise on the rivers of the Provinces of the Republic.—The steamer *Pachitea*, which anchored in the port of Valparaiso on November 17, 1912, was the first PERUVIAN VESSEL to visit Chilean waters for commercial purposes for more than 30 years. The Peruvian Steamship Co., to which this vessel belongs, proposes to establish a monthly service between Peruvian and Chilean ports. The *Pachitea* brought a cargo of sugar and other merchandise to Chile and returned with a cargo of hay and sundry goods.—The National Nitrate Society has been organized in Santiago, with a capital of £1,200,000, for the purpose of exploiting NITRATE properties in the Republic.—The municipality of Vina del Mar has been authorized by the Federal Congress to negotiate a LOAN, not to exceed £200,000, at 5 per cent annual interest and a yearly amortization of not less than 1 nor more than 2 per cent, to be used in paving streets, constructing sidewalks, public baths, sanitation, public buildings, crematory plant, slaughterhouse, etc.—A law of the

Republic of Brazil, of October 25, 1912, places Chilean nitrate on the free list, beginning with January, 1913.—According to a law of July 16, 1912, effective October 21 of the same year, one year is the maximum term during which imported merchandise may be STORED in the customs warehouses of the Republic. —An AGRICULTURAL congress has been organized to promote the agricultural interests of the Provinces of Concepcion, Arauco, Biobio, Cautin, and Malleco. The hydraulic inspection office of the Government of Chile will appoint a committee of engineers to study and report upon the construction of new IRRIGATION canals in different parts of the country. The department of industry and public works of Chile has appointed a committee to study and report upon the AGRICULTURAL SCHOOLS of the country. —A Government engineer has been commissioned to go to the mining districts of northern and southern Chile to report upon the advisability of the exploitation of UNWORKED MINES.—A discovery of GOLD ORES has been made in the Department of Melpilla, on the Quillayes ranch. Assays of these ores show from 220 to 168 grams of gold per ton.—The department of industry of the Government of Chile has been informed of the existence of PETROLEUM in the vicinity of Antofagasta and has sent an engineer to examine and report upon the property. An engineer has also been sent to Magallanes to report upon the existence of petroleum in Cambridge Island.—The exploitation of COAL MINES at Talcahuano and Arauco has been very active recently. The department of industry of the Government of Chile has compiled data concerning the IRON INDUSTRY of the Republic for distribution by the Chilean legations and consulates for the purpose of attracting the investment of foreign capital in the exploitation of coal properties. It is said that a company has been formed in Paris, with a capital of 300,000,000 francs, with the object of establishing a large iron smelter in Chile to compete with the Corral smelter. There is a large quantity of iron ore in northern Chile, some of the samples of which assay as high as 66 per cent of iron.—Construction work is actively being carried forward on the Arica to Zapiga RAILWAY, 80,000 pesos having been appropriated for that purpose. A preliminary survey has been made for the construction of the Alamo to Molina Railway. —The inauguration of the RAILWAY between Santiago and La Serena took place during the latter part of November, 1912. —A new plan has been presented to the National Congress for the ELECTRIFICATION of the State railways between Valparaiso and Santiago, Las Vegas and Los Andes, and Santiago and Talca, at an estimated cost of £5,000,000.—The Howard Syndicate has been authorized to open to public traffic 118 kilometers of RAILWAY and 1,470 meters of tunnel between Tilma,

Parral, Vallenar, and Toledo. — Chile has at present more than 2,600 PUBLIC SCHOOLS and numerous private institutions, and among the teaching force are several highly accomplished specialists from Europe and from North America. Many improvements in technical education are under consideration by the school officials.

COLOMBIA

The TERMINAL STATION of the Amaga Railway on the Cauca River in the District of Venecia is to be built at kilometer 81 at a point 10 meters higher than the normal waters of that stream.

The Government has authorized Mr. Tomas Clark to NAVIGATE, under the English flag, the Patia and Telembi Rivers in the steamboat *La Palomita*. — An ELECTRIC light and power plant was recently installed at Carmen, in the Department of Bolivar. —

An order of the treasury department prohibits TRAVELING SALESMEN from importing more than 1,000 kilos of salable samples free of duty. — Dr. Francisco Jose Urrutia has been appointed MINISTER of foreign affairs of Colombia. —

The LEGISLATIVE COMMITTEE recently established by a law of Congress is composed of Dr. J. M. Gonzalez Valencia, chairman; Dr. Miguel Abadia Mendez, vice chairman; and Dr. Miguel J. Canal, secretary. —

CARTAGENA BAY has recently been dredged to a depth of 3 meters in the canals over an area of 3,500 square meters. — The post office at Bogota received from abroad in 1911 PARCELS POST packages to the number of 45,246, weighing 145,823 kilos, on which import duties amounting to \$124,311 were paid. During the same period the office at Medellin received 13,229 packages, weighing 55,052 kilos, on which duties were collected to the amount of \$58,620.50. —

A recent treasury order requires the filing in duplicate, at the time of paying the ANNUAL TAX ON MINES, of a statement giving the name of the payer or of his principal, the year, name of mine, area and situation, boundaries, etc. One of these statements will be returned to the party in interest and the other retained. —

The "Lago del Centenario" (Lake of the Centenary) at Bogota is soon to be NAVIGATED by some small boats constructed by Dr. M. Bernal Tapia, a Colombian engineer. —

Local government was officially established on the San Andres and Providencia ISLANDS on January 1, 1913. — The sum of \$4,000 has been appropriated to repair the SANITARY STATION at Port Colombia. —

A VACCINE STATION has been established in Bogota to supply the Republic of Colombia and other South American countries with

vaccine. A BANK has been established in Medellin under the name of "Banco Aleman-Antioqueño." A TOBACCO factory is to be established at Penalisa by Colombian merchants and manufacturers. Juan Manuel Davila, a Colombian aviator, has presented the National Government with an AEROPLANE for the purpose of establishing an aviation school in the Republic. — The SANITARY CONVENTION of December 3, 1903, as amended in Paris on January 17, 1912, has been ratified by Colombia. The Federal Government has appropriated \$5,000 toward the erection of a statue in Buga to Jose Maria Cabal, a Colombian general and patriot. The statue will be unveiled on August 19, 1916, the centenary of the death of Gen. Cabal. — A CLOTH AND CORD factory has been established at Barranquilla. A plant in the vicinity producing fiber similar to jute or henequen will furnish the raw material for operating the factory. It is reported that a company has been organized in London with a capital of £200,000 for the purpose of buying MINES and real property in Colombia. The PENAL AND AGRICULTURAL COLONIES recently established under an act of Congress commenced operations on the 1st of the present month. A TOBACCO FACTORY, said to be the largest in the Republic, has been established at Girardot. An AGRICULTURAL SOCIETY has been organized at Bucaramanga. A contract has been made for the establishment of a WIRELESS TELEGRAPH station on the Archipelago of San Andres and Providencia for the purpose of opening up communication with the United States. Nineteen new POSTAL ROUTES have been recently established in the Republic. — Under a contract made with the Federal Government the Sucre Bank at Medellin will operate a MORTGAGE department. — The steamboat *Girardot*, constructed in the canalization offices in Colombia for use in dredging the MAGDALENA RIVER, has been launched. The Government has founded throughout the Republic PEDAGOGIC LYCEUMS at the capitals of the Departments and provinces in order to encourage and further the cause of education. — The POSTAL RATES in Colombia on foreign correspondence are as follows: Letters, \$0.05 for each 15 grams or fraction thereof; single postal cards, \$0.02, double, \$0.04; and for printed matter, business papers and samples, \$0.01 for each 50 grams or fraction thereof. — The press of Medellin is authority for the statement that the minister of Colombia in France has contracted with the banking house of Dreyfus Bolo in Paris to found a BANK at Bogota with a capital of \$12,000,000. The bank is to loan money on mortgages for a period not exceeding 20 years, and will furnish the Government with money at par at an annual interest rate of 5 per cent.



COSTA RICA

The cultivation of the celebrated Italian grass known as "RHODES GRASS" has greatly increased in Costa Rica during the last few years. Formerly the price of this grass seed in the Republic was 4 colones per pound, but at the present time it sells at 2 colones per pound. The agricultural experiment station at Guadalupe recently sent 150 pounds of Rhodes grass seed to the department of agriculture in San Jose for distribution to farmers and plantation owners interested in its cultivation throughout the country.—The municipality of Naranjo has contracted with Victor Corrales for the construction of a MUNICIPAL BUILDING in that town. —An American contracting firm is negotiating with the municipal authorities of San Jose concerning the PAVING of the streets of the capital of the Republic. The firm referred to states that the stone found in the vicinity of San Jose is unsuitable for paving purposes, and that stone will have to be brought from quarries along the line of the Pacific Railway. Mr. A. S. Harrison represents the American firm in negotiating the contract for the paving of the streets of the metropolis of the Republic. —The department of agriculture of the Republic of Costa Rica is doing active propaganda work looking to the development of AGRICULTURE and the elimination of improper methods of cultivation. One of the measures recently advocated is the lessening of the practice of burning over agricultural lands now so prevalent in the Republic, and clubs are being formed, under the direction of the department of agriculture, to prevent this custom.—The Government of Costa Rica has asked for bids for the construction, equipment, and exploitation of an ELECTRIC RAILWAY between the cities of Alajuela and Grecia, with a branch to San Pedro de Poas. The bids must be delivered to the department of fomento not later than January 31, 1913. The Purdy Engineering Co. roughly estimates the probable cost of construction, equipment, etc., at more than 1,700,000 colones.—The Fifth CENTRAL AMERICAN CONFERENCE met in San Jose, Costa Rica, on January 1, 1913. The delegate of Costa Rica was Sr. Faustino Viquez Zamora; of Honduras, Gen. Saturnino Medal; of Salvador, Dr. Rafael Meza. For some time past there has been a scarcity of fractional silver coins of small denominations in circulation in Costa Rica. To remedy this condition the President of the Republic decided to place in circulation, through the department of finance, 267,783 SILVER COINS of the denomination of 10 centimes each, aggregating a value of 26,778.30 colones, and 535,565 silver coins of the denomination of 5 centimes each, representing a value of 26,778.25 colones. These

two issues of coins, which amount in value to 53,656.55 colones, were minted in Philadelphia. —The ICE FACTORY which supplies Esparta and Puntarenas is situated at Mojon on the Cantillo plantation, about 1 kilometer from Esparta. The owners of the factory, the Drs. Lopez Cantillo, installed an ice plant at that point about a year ago. Since that time the consumption of ice in the vicinity has grown to such an extent that it has been necessary to enlarge the plant by installing additional machinery. The water used in the manufacture of ice is exceptionally pure and is taken from a large spring on the property. The total capacity of the enlarged plant is 3 tons of ice per day. The Esparta River runs through the plantation on which the ice factory is located. This river contains ample water to generate sufficient power to run the machinery. The Drs. Lopez Cantillo also operate a carbonated water factory at Esparta. The pay roll of the ice factory amounts to 200 colones per week. Other manufacturers at Esparta are Figueroa Bros., whose weekly pay roll exceeds 500 colones. The potable water supply of Esparta is abundant and of a fine quality. —The Government of Costa Rica recently purchased in Germany 100 Costa Rican FLAGS for 1,227.75 colones.—Climaco Arias, a young Costa Rican MECHANIC of Cartago, who has shown considerable skill in the exercise of his calling, has gone to the United States to complete his education in a manufacturing establishment in Philadelphia. —At the STOCK show recently held at Heredia a large number of blooded cattle was disposed of at prices varying from 46 to 18 centimes per kilo. The principal sellers were: Alberto Young, Santiago Zamora, Gonzalo Castro, Jose Maria Castillo, Francisco Zamora, Rafael Lobo, Alberto Chaverri, and Esteban Ramirez. At the close of the fair over 200 head of cattle still remained unsold. —The SCHOOL OF FINE ARTS at San Jose has about 50 pupils of both sexes. —“El Noticiero,” a daily newspaper of San Jose, in its issue of December 10, 1912, publishes a list of all the MUNICIPAL OFFICERS recently elected in the Republic. Carlos Enrique Bobertz has been appointed CONSUL of Costa Rica, ad honorem, at Los Angeles, California. —The new STATION of the Pacific Railway at Puntarenas has been opened to public traffic.—Sr. Alberto Echandi, a member of the sanitation board of the city of San Jose, in an interview concerning the WATER SUPPLY of the Federal capital, states that the new tank at Curridabat has a capacity of 6,000,000 liters of water, sufficient to store all the water issuing day and night from the springs from which the capital obtains its water. This is enough water to supply a city of 50,000 inhabitants. Sr. Echandi attributes the present shortage of water in San Jose to waste. —A consignment of AGRICULTURAL machinery is expected soon to arrive from the United States for the Orotina Experimental Station. —Steps have

been taken to extend the **TRAMWAY** from San José to Coronado. It is estimated that the receipts due to the extension would be more than 50 colones a day. — The town of Piedades is to be supplied with **ELECTRIC** light and power from the electric light and power plant at Brasil. — The Government of Costa Rica, acting through the department of public instruction, has commissioned Dr. Vicente Castro Cervantes to specialize in France in the study of **PATHO-LOGIC ANATOMY**. A monthly stipend of 650 francs is allowed for necessary expenses. — A contract has been awarded the English Construction Co. (Ltd. for the erection of a **BARRACKS AND JAIL**, at Cartago, the former to cost 199,155 colones and the latter 200,000 colones. — The municipality of Santa Ana has modified its contract with the Costa Rica Electric Light and Traction Co. so as to secure better **ELECTRIC** service. The modified contract is subject to the approval of the President of the Republic. — The tax on the sale of tickets of the Pacific Railway in August, September, and October, 1912, in favor of the **HOSPITALS** of Puntarenas, San José, and other cities of the Republic aggregated 2,156.10 colones. — The **CANTON OF PURISCAL** is one of the richest agricultural sections of the Republic of Costa Rica. An exceedingly fertile part of this canton is "Los Canales," which ships annually more than 2,000 bushels of corn, 1,000 bushels of beans, and considerable quantities of sugar. With better transportation facilities and good roads, which the press of Costa Rica is now advocating for this section, the production of "Los Canales" and of the canton of Puriscal would be greatly increased. — The department of agriculture of Colombia has forwarded to the agricultural department of the Government of Costa Rica two boxes of **SEED POTATOES** of a fine quality, and said to be proof against the diseases common to that tuber. The seeds will be planted at the agricultural experiment station at Guadalupe. — The bureau of public works has ordered a survey of a **HIGHWAY** between Agua Caliente and the rich lands of "El Muñeco" in the district of Cartago.



Permission has been given to Juan M. Lamadrid to install an **ELECTRIC** light and power plant at Sancti Spiritus for the purpose of supplying light and power to the towns of Sancti Spiritus, Caban-guan, Guayos, and Zaya del Medio. The installation must be completed before the close of 1913. — The foreign **COMMERCE** of Cuba for the first half of 1912 amounted to \$167,408,796, of which \$69,312,100 were imports, and \$107,096,696 exports. — The **STATUE**

erected at Parque de la Punta in Habana in memory of Jose de la Luz Caballero, a Cuban jurist, scholar, and patriot, will be unveiled on February 24, 1913. --"La Lucha," a daily newspaper of Habana, says that the PARCELS POST TREATY between Cuba and the United States is now likely to be agreed to, as the United States has signified its intention of permitting the entry of Cuban cigarettes in small shipments. The treaty proposed permits packages of merchandise to be exchanged that do not exceed 11 pounds (5 kilos) in weight and 3½ by 6 feet in length and breadth combined. The approximate duty is to be fixed by each of the countries receiving the parcels, thus avoiding the keeping of special postal accounts, senders being required to make a special declaration on a custom form. -- In round numbers \$90,000,000 worth of SUGAR is exported from Cuba annually, as compared with \$23,000,000 worth of tobacco, minerals, and fruits. Branches of the Spanish BANK of the island of Cuba, the Territorial Bank of the Republic of Cuba, and the Royal Bank of Canada have been established at Nuevitas. These banks propose to open other branches in important commercial centers of the island. At the close of 1912 and the beginning of 1913 five steamers arrived in Habana with 3,861 IMMIGRANTS from European ports. These immigrants were principally Spanish laborers who come annually to the island to work in the sugar fields, returning to Spain after the harvest is over. -- The Cuban Senate has passed a bill permitting OXCARTS loaded with sugar or sugar cane to use the macadam roads of the Republic until May, 1913. The Guantanamo coaling station TREATY between Cuba and the United States has been formulated. Under this treaty Cuba is to be given back the territory donated to the United States at Bahia Honda in exchange for extra territory at Guantanamo adjoining the present coaling and naval station at that point. Before becoming operative the treaty must be ratified by the Cuban and American Senates. A recent executive decree grants the Nipe Bay Co. authority to import from Panama, Colon, and Spain 2,000 white Spanish IMMIGRANTS to be employed in cane cutting at the mills of that company. The Nipe Bay Co. grants the laborers referred to work and passage to Cuba. -- The National BANK of Cuba has declared a semiannual dividend of 4 per cent United States currency in favor of the shareholders of record December 31, 1912. --Jose Tabares has been authorized by the city council of Habana to erect an ELECTRIC light and power plant in the suburbs of Habana. The Federal Government has likewise granted permission to Antonio Ramos Valdenas to extend the electric service from Camajuani to La Fe plantation, and to the towns of Vega de la Palma, and San Antonio de Vueltas.-- The AQUEDUCT at Santiago de las Vegas has been completed, thereby giving the town an abundant supply of potable water. --The Senate of

Cuba recently approved the following diplomatic and consular appointments: Manuel Marquez Sterling, minister to Mexico; Charles Aguirre, minister to Peru; Nicolas Perez Stable, consul in Halifax; Prospero Pichardo, consul in Galveston; Alfredo Zayas Arriate, vice consul at Ste. Nazaire; and Julio Fabre, vice consul in Chile attached to the Chilean Legation.—Antonio Ramos Valdera has been authorized by the Cuban Government to establish an ELECTRIC light and power plant at Jovellanos.—A new magazine entitled "The Times of Cuba" is being published at Habana, the first issue appearing on December 28. The 42-inch MAIN connecting the Palatino reservoir with the water mains of the city of Habana has been placed in operation. This main, the laying of which was commenced about two years ago, will practically double the water supply of the city of Habana. The contracting firm was the Tropical Engineering Co. — Dr. Enrique B. Barnet has been appointed chief of La Benéfica HOSPITAL in Habana. This hospital is the largest in Cuba, and is one of the great private hospitals of the world. The tax collected for account of the public DEBT during the fiscal year 1912-13 amounted to \$1,992,497.16, as compared with \$1,782,690.83 for the same period of 1911-12. Experiments are being made looking to the use of Cuban ASPHALT for fuel. This substance, when mixed with bagasse, is said to be an excellent fuel for use at the sugar mills and is much cheaper than coal. Large asphalt deposits are found in the Provinces of Habana and Pinar del Rio, both of which are centers of the sugar industry.

DOMINICAN REPUBLIC

The press of the Dominican Republic gives the Cabinet of President Nouel as follows: Lic. Andres Julio Montolio, interior and police; Lic. Francisco Leonte Vasquez, foreign relations; Lic. Eduardo Soler, finance and commerce; Lic. Elias Brache, war and marine; Lic. Manuel de J. Viñas, justice and public instruction; Sr. Samuel de Moya, agriculture and immigration; and Sr. José Manuel Jimenes, fomento and communications. — The President has appointed the following persons GOVERNORS of Provinces of the Dominican Republic: Emilio Tejera Bonetty, governor of the Province of Santo Domingo; Antonio Acevedo, governor of the Province of Azua; Jaime Mota, governor of the Province of Barahona; Andrés Beras, governor of the Province of Seybo; Victor M. de Castro, governor of the Province of San Pedro de Macoris; Lic. José Ma. Nouel, governor of the Province of Puerto Plata; Franco Bidó, governor of the Province of Santiago; and Gen. Toribio L. Garcia, governor of the Province of Monte Cristy. Rafael Estrella has been authorized

to construct a TELEPHONE line between his residence in Santiago and the Cruz de Isalguez plantation. —The production of the SUGAR Central "Consuelo de Macoris" for the present season is estimated at 200,000 sacks. This central has recently been supplied with new machinery. —The ladies of the city of Santo Domingo in the borough of Carmen have formed a PHILANTHROPIC SOCIETY with the special object of aiding and relieving the sufferings of poor children. —A new AUTOMOBILE service has been opened to the public in the city of Santo Domingo, and will later be extended to San Jeronimo. —The board of commerce of the city of Santo Domingo maintains a file of CATALOGUES of foreign houses in its consultation rooms for the use of the public. —The Dominican Congress, a special session of which met on December 6, 1912, has authorized the President of the Republic to contract a LOAN of \$1,000,000, under the terms of the Dominican-American convention, to meet the financial exigencies of the Government. —An important printing establishment at San Pedro de Macoris has equipped its plant with ELECTRIC power with which to operate its presses and other machinery. An American electrician is in charge of the installation. —Press reports from Santiago, Dominican Republic, state that the ELECTRIC light plant at that place will be installed and ready for use in June of the present year. —Sr. Enriquillo Henriquez has been appointed first secretary of the LEGATION of the Dominican Republic near the Governments of France, Italy, and Spain, and Sr. Enrique Deschamps has been made chargé d'affaires of the Dominican Republic in Spain and Portugal. —Sr. Roque Freites has been appointed CONSUL general of the Dominican Republic at Madrid. Sr. Alberto Oquet has been appointed acting consul general of the Republic of Mexico in the city of Santo Domingo. —A considerable quantity of Sea Island COTTON seed has been given the Board of Trade of Puerto Plata for distribution to plantation owners in the vicinity of that city. —The President of the Argentine Republic has presented the Dominican Government with a handsomely bound volume of the BOOK entitled "ARGENTINA Y SUS GRANDEZAS" (Argentina and its Wonders) written by Blazco-Ibañez. —A sample of the RAPID-FIRE GUN invented in August, 1912, by Sr. M. Gustavo Brunes, a young Dominican engineer, has been placed on exhibition in the store "La Villa de Londres" in the city of Santo Domingo. The weapon is capable of discharging 112 shots per minute. —On December 6 last, the first edition of the new WEEKLY PAPER entitled "Pro Patria" was issued at Azua. The publication is owned and edited by Messrs. Mateo & Striddels. —President Nouel has invited EXPATRIATED citizens of the Republic residing abroad to return to the country. Among the number returning are some of the most prominent members of the party in opposition to the former Government.

ECUADOR

The Government of the United States has invited the Government of Ecuador to participate in the Congress of HYGIENE to be held in Buffalo, N. Y., in August, 1913. — Sr. Carlos Tobar Borgono has been appointed CONSUL GENERAL of Paraguay in Ecuador.

An interesting pamphlet on the geography, statistics, and commerce of Ecuador has been published by the consul of Ecuador in Havre as PROPAGANDA DATA for use of emigrants, capitalists, and agriculturists. — An executive decree, recently promulgated,

provides funds for the repair and extension of the HIGHWAY from Cuenca to Huigra by the levying of a special state tax on the manufacture and sale of aguardiente. — Sr. Enrique Escudero has been appointed secretary of the LEGATION of Ecuador in Washington.

The department of public instruction of the Government of Ecuador has taken steps to organize PEDAGOGIC SOCIETIES in the different Provinces of the Republic for the purpose of furthering the cause of education. — A decree of November 9, 1912, published in the daily newspaper entitled "Grito del Pueblo" of Guayaquil of December 1 last amends the CODE OF CIVIL PROCEDURE.

Mr. Joseph A. Cleveland has been appointed chief construction engineer of the RAILWAY from Guayaquil to Playas. It is reported that a thousand laborers are soon to be employed in building this line. — The COOPERATIVE SOCIETY of Guayas at Guayaquil recently elected the following officers: Guillermo H. Carbo, president; Jacinto J. Arce, treasurer; and Teófilo Guillén, secretary. — The capital of the Central BANK of Ecuador is 1,000,000 sucres, divided into shares of 100 sucres each, 4,000 shares of which belong to the International Issue and Investment Bank (Ltd.), of London. The manager of the new bank is Pablo Gozembach.

In compliance with a request of the merchants of Bahia and Chone, the Bahía RAILWAY has reduced its local freight rates on merchandise consigned to and from these places. — Messrs. Fox and Moore, constructing engineers of the Curaray RAILWAY have employed Manuel Navarro, an Ecuadorian engineer, as head engineer of construction work. — A WIRELESS telegraph station has been established at the customhouse in Guayaquil, and the *Carmela*, a Government boat employed in the Guayaquil Harbor and vicinity, has been fitted up with a wireless telegraph installation. — A branch of the astronomical OBSERVATORY of Quito is to be established at Guayaquil under the direction of Luis G. Tufino. — The death in the Federal capital of Dr. Manuel Maria Casares, an eminent Ecuadorian physician and educator connected with the Central University of Quito

was cause for the issuance of a Federal decree making November 20, 1912, a day of public MOURNING. — The new law under which the municipalities of the Republic are governed provides that the cantonal boards shall expend half of the MUNICIPAL TAXES collected in each rural parish for the exclusive benefit of that parish, in public buildings, primary schools, water supplies, and other works of local improvement. — A surtax of 17 per cent has been levied on merchandise imported by PARCEL POST through the custom-houses of the Republic, with the exception of rice, flour, noodles, lard, wheat, bran, plows, rakes, window bars, spades, crowbars, hoes, machetes, and cotton goods. — A plan has been submitted to the Federal Government for the construction of a BRIDGE over the Guayas River between Guayaquil and Duran. The building of this bridge will enable the Guayaquil to Quito Railway to establish a terminal station in Guayaquil. Press reports state that J. G. White & Co., of New York, are interested in carrying out the project. — The police department of Guayaquil, acting in accord with the National Telephone Co. and with the Federal and municipal authorities, will establish a special telephone service in that city for use in the municipal and Government offices. — A daily newspaper of Quito, "El Comercio," publishes in its issue of November 29, 1912, the rules and regulations of the ACADEMY of Lawyers of the Federal capital. — A FOOTBALL team, composed chiefly of the students of the schools and colleges of Latacunga, has been organized in that city. — COL. W. C. GORGAS, who recently made extensive studies and investigations of the HEALTH CONDITIONS of the port of Guayaquil, is now in the United States for a brief visit. He reports that conditions may be greatly improved by adopting modern sanitary measures and that such action will probably be taken by the Ecuadorian authorities at an early date.



GUATEMALA

In October, 1912, the IMPORTS of the Department of Izabal, Republic of Guatemala, amounted to 86,206 packages of merchandise, and the EXPORTS to 1,444 sacks of coffee, 220,219 bunches of bananas, 67 bales of skins, 11,160 oxhides, 694 sacks of sugar, 121 sacks of rubber, 63 sacks of horns, 80 sacks of minerals, and a number of other articles. — An executive decree of November 30, 1912, changes the name of the Guatemala Railway Co. to that of the INTERNATIONAL RAILWAYS OF CENTRAL AMERICA. The change of name does not in any way affect the prior contracts and obligations of the company. — In accordance with an executive

decree of December 4, the sum of 9,000 pesos is made available for the purchase of 600 yards of iron piping to be used in conveying POTABLE WATER to the municipality of Casillas, Department of Santa Rosa. — A MUNICIPAL BUILDING is being erected at San Diego in the Department of El Progreso. — A law has been passed requiring TRANSLATORS residing in the Republic to register. After January 15, 1913, unregistered translators can not lawfully exercise their calling. — A recent executive decree provides that the customhouse at Puerto Barrios shall furnish 10,116 pesos for the construction of a TELEGRAPH line between Las Quebradas and La Trocha on the Honduran frontier, via Macuelizo. — A contract has been made by the Department of Fomento with Reginaldo Solorzano for the reconstruction of the KIOSK in Concordia Garden in the city of Guatemala. — A contract has been entered into by the Electric Light Committee of Momostenango, Department of Totonicapán, and Frederic Spross for the installation of an ELECTRIC light and power plant in Momostenango. — The President of the Republic has appointed the following COMMITTEE OF PUBLIC WORKS in the city of Quezaltenango: President, the mayor of the city; vice president, José Pacheco Monteros; members, José Madrid, J. Ignacio Saenz, and J. Antonio Castillo; treasurer, Lucas T. Cojulum; auditor, Justo R. Mazariegos; and secretary, the secretary of the mayor's office. — The Guatemala REAL ESTATE Co. (Ltd.), organized in Brussels, has been granted permission to transact business in the Republic of Guatemala. — The by-laws of the COMMERCIAL SOCIETY of Mutual Assistance have been modified so as to make a quorum for the transaction of business any number of members in excess of one-half the total number of stockholders. — The by-laws of the society "Federacion Ibero Americana Colonial," a Spanish organization, have been approved by the executive power. — During the month of November, 1912, there were constructed in the Department of Jalapa 35,240 meters of PUBLIC ROADS and 1,000 meters of bridle paths. — A building is in course of construction in the city of Guatemala for the use of the NATIONAL SCHOOL OF INDUSTRY. — The Colon Theater in the city of Guatemala has been provided with an ELECTRIC light and power plant for the exclusive use of the theater. — The School of ARTS of Quezaltenango, one of the most flourishing institutions of its kind in the Republic, is under the direction of Sr. Don Luis Luti. — On November 21, 1912, the MONUMENT erected in the Plaza Reina Barrios, in the City of Guatemala, in commemoration of the completion of the Northern Railway and the entrance of the first locomotive into the Federal capital, was unveiled in the presence of President Manuel Estrada Cabrera, members of his cabinet, and an assemblage of distinguished persons. This monument, which was designed by Luis A. Fontaine,

is made of blocks of rough granite, some of which have a volume of more than 3 cubic meters. The monument stands 12 meters above its foundations, weighs over 600 metric tons, and is a symbol of work and peace. The water flowing from its side represents strength, and the statue of Ceres which crowns its summit is a symbol of the agricultural wealth of the country. The statues of Mercury and Vulcan to the right and left, respectively, are symbolic of commerce and the forces of steam and electricity at the present time so evident in the development of the resources of the Republic.



HAITI

The health commissioners of the city of Port au Prince recently called the medical practitioners of the city together in a CONGRESS OF PUBLIC HYGIENE for the purpose of considering and studying methods for the improvement of the health conditions of Port au Prince and their effective application. Among the important questions discussed and which have a vital bearing on the public health of the community were those relating to the paving and cleaning of the streets, the improvement of the hydraulic system of the city, and the tapping of new sources in order to obtain a greater volume of water per capita. On November 21, 1912, President Auguste promulgated the law passed by Congress authorizing the secretary of public works to undertake the work of REPAIRING and reconstructing the system of WATERWORKS in the shortest possible time. An appropriation of \$400,000 was voted by Congress for this purpose. Among other measures considered by the congress were those relating to the control of the slaughterhouse, sale and inspection of milk, verification of deaths, etc. The report of the proceedings of the congress has been prepared by Dr. Lebrun Bruno, director of the municipal bureau of hygiene. —The TEACHERS' ASSOCIATION of Port au Prince recently held an important meeting, in which plans were discussed for increasing the attendance in the schools of the country, which at the present time shows a falling off of two per thousand in the rural districts. The president of the association, Mr. L. C. Lhérisson, an officer of the French Academy, has sent a letter to the secretary of the interior, calling attention to the present condition and offering the cooperation of the association and the submission of a plan of reorganization of the primary schools which is believed will increase the attendance. —The Union of Haitian Sports is arranging a series of football games to be played in the near future for the championship of Haiti. On September 21, 1912, President Auguste signed the bill passed by Congress on September 12, authorizing the Government to

engage one or several expert mining engineers to study the guano and phosphate deposits and those of magnetic iron, pyrites of iron, and cinnabar, as well as any others of easy access. An appropriation of \$25,000 has been voted to defray the expenses attached to this enterprise. The report of these engineers and any information obtained will be published by the department of public works in the *Moniteur*, the official newspaper of Haiti. — On the same date the President also signed the bill voted by Congress on August 28, 1912, authorizing the secretary of public works to call for bids for the construction at Cayes of a wharf in cement or any other material fulfilling the desired requisites of solidity and durability, extending into the water to a sufficient depth to permit vessels of the largest draft to dock. The port of Cayes has been steadily losing its prestige as a commercial port owing to the continual shifting of the sands in the harbor, and many steamship lines were on the point of abandoning it as a port of call on account of the difficulties encountered in the loading and unloading of the ships. With the building of the new wharf Cayes is destined to become one of the principal ports of the country. — Owing to the improved condition of the streets of Port au Prince the automobile craze has struck the city, and there are now 10 passenger cars and 1 automobile truck running through the streets of the town and more have been ordered. — The secretary of the navy of Haiti has informed the public, under date of December 16, 1912, that the two warships, the *Nord Alexis* and the *Pacifique*, which grounded on a sand bank off the coast of Cuba during a severe storm, have been floated and towed into the port of Habana for repairs and will soon be put into service.



HONDURAS

The RECEIPTS of the National Railway in October, 1912, were 45,670 pesos. The balance on hand at the beginning of that month was 2,526 pesos, making the total available cash funds during the month referred to 48,196 pesos. The expenditures during the month were 47,429 pesos. — The official newspaper of Honduras of November 23, 1912, publishes the rules and regulations governing PUBLIC ROADS and road construction in Honduras, consisting of 4 chapters and 51 articles. The rules and regulations concerning PATENTS OF INVENTION, the Spanish text of which is published in *La Gaceta Oficial* of November 23, 1912, provide that requests for patents shall be made through the department of fomento until a special patent office is established in Tegucigalpa. Patents are issued to Honduran inventors for terms of 20 years, subject to annual

taxes of from 5 to 10 pesos, according to the importance of the invention. Foreign inventors enjoy the same rights as natives except that an annual registration tax of from 10 to 50 gold pesos is imposed. Requests for patents must be made in duplicate, accompanied by duplicate engravings or drawings. Patent rights are forfeited by failure to pay the taxes prescribed by law, by the expiration of the term for which patents are granted, and by judicial decisions declaring the patent to have been issued in contravention of the rights of third parties. —The Central PHARMACY Co. has been organized in the city of San Pedro Sula, with a capital of 60,000 pesos. The Dolores MARKET building in Tegucigalpa has been accepted by the city and is now in operation. — The Government of Honduras has granted a subsidy of 35 pesos per month to the school for the manufacture of STRAW HATS established in the city of Catamarca, Department of Olancha. Juan Alvarado & Co. have been authorized to import free of duty the machinery necessary for the use of their SHOE FACTORY in Tegucigalpa. A recent decree of the President of Honduras provides funds for the operation of the LIGHTHOUSES on the islands of Roatan, Utila, and Guanaja. The Roatan customhouse is an important shipping point. — The Government of Honduras has contracted for a supply of 46,200 bottles of AGUARDIENTE per month for sale and consumption, under the laws of the Republic, in the different Departments of the country. — General Somoza Vivas, consul of Honduras in San Francisco, has been instrumental in inducing the manufacturers and merchants of California to make an effort to secure a larger share of the trade of Central America, and especially that of Honduras. With this end in view a representative of a number of the principal industries of that State and of the Pacific coast recently visited the towns of La Ceiba, Tela, Puerto Cortes, San Pedro Sula, Santa Barbara, and Comayagua, and reports excellent prospects for increased trade development both as to imports into and exports from Honduras. — The Agalteca Mining Co. has been organized in the United States under the laws of Delaware to exploit on a large scale the Agalteca iron ores. The new company absorbs the "Aventura de Agalteca" company, which formerly operated these mines. —The Uluá RIVER, one of the principal streams of Honduras, is navigable for steamers of light draft at all seasons of the year to its junction with the Humuya River, and during the rainy season as far as Sulaco. With a slight expense for dredging the Humuya River could be made navigable to Ojos de Agua, about 12 leagues from Comayagua. On December 11, 1912, a new locomotive and 52 tons of rails arrived at Puerto Cortes for the use of the National RAILWAY. —A school for girls for the manufacture of STRAW HATS was opened in Tegucigalpa on the first of the present year under the direction of a capable instructress.

Ten young women, 15 years of age or over, will be admitted to the institution. — A. W. Duckett has been appointed CONSUL ad-honorem at Newport News, Virginia, Pedro Jaun Berkhout, consul ad-honorem at Rotterdam; and Eduardo E. Crone, consul ad-honorem at Amsterdam. — The ELECTRIC light and power plant at San Pedro Sula was inaugurated with proper ceremonies in that city on November 30 last. — "*El Nuevo Tiempo*," a daily newspaper of Tegucigalpa, publishes in its issue of December 4, 1912, the semi-annual report of the INTERNATIONAL CENTRAL AMERICAN OFFICE covering the period from March 15, 1912, to September 14 of the same year. — The available revenue of the Bahia Islands for September, 1912, amounted to 19,881.68 pesos. — The Government of Honduras has granted a concession to Emilio P. Dutú for a period of five years to extract rubber from RUBBER yielding plants (excepting the wild Castilloa and Hevea) on Government lands in the Departments of Atlantida, Colon, Olancha, and Yoro. Permission is given for the free importation in a single shipment of the tools and machinery necessary for engaging in the work. The concessionaire agrees to export annually not less than 5,000 kilos of rubber and to pay to the Government of Honduras \$3 gold for each 50 kilos of rubber exported. — Ceiba, the great BANANA PORT, ships nearly \$1,000,000 worth of bananas annually, and the revenue from this one source is considerably larger than that of other towns of only 5,000 population, which is the number of people accredited to Ceiba. A large portion of this revenue is appropriated for advancing education, and as a consequence the schools of the city are in an excellent condition.



MEXICO

The FIRST MEXICAN SCIENTIFIC CONGRESS was held in the hall of the National Museum in the City of Mexico from December 9 to 14, 1912, under the auspices of the "Antonio Alzate" Scientific Society. The Congress was opened by President Francisco L. Madero. After the election of the honorary officers, Dr. Alfonso Pruneda was elected president of the society; Prof. Alfonso L. Herrera, vice president; Prof. Rafael Aguilar y Santillan, secretary general; and Gabriel M. Oropesa, treasurer. — On December 8, 1912, the CHAMBER OF COMMERCE of Toluca was installed. Ignacio Zarragoza was elected president, and Jesus de la Torre, vice president. — A bequest of \$400,000 has been made for the establishment of an AGRICULTURAL SCHOOL near the city of Merida in the

State of Yucatan. From the first of the present year the government of the State of Puebla has increased the SALARIES of all State employees 10 per cent. --The Government of Mexico has authorized the construction of LIGHTHOUSES on the Pacific coast at Punta Maldonado, Guerrero, Ayutla, Oaxaca, and Puente de San Telmo, Michoacan, at a total cost of more than 100,000 pesos. It is expected that these lighthouses will be in operation by March of the present year. ---A LOAN of 50,000,000 pesos is to be negotiated by the State of Michoacan on the basis of a 6 per cent bond issue at 85. --The MONUMENT erected to the memory of Gen. Jose Maria Morelos in San Cristobal, Ecatepec, was unveiled on December 20, 1912, the ninety-seventh anniversary of the execution of Morelos. --On February 1, 1913, the National SCHOOL OF AGRICULTURE will open its sessions. The Mexican Government is showing great interest in agricultural matters, more than 300 persons having received appointments as agents of the bureau of statistics of the department of fomento to make crop reports. --Lic. Francisco Leon de la Barra, former President of the Republic and ex-ambassador of Mexico to the United States, has been elected governor of the State of Mexico. The National SCHOOL OF TELEGRAPHY in Mexico City gives a two years' course of instruction with a guaranty of a position in the Federal telegraph office to competent graduates. --The sale of MATCHES made from white phosphorus is prohibited in the State of Puebla. The Mezquital MINING Co. of Zacatecas has begun the operation of its 50-stamp cyanide plant and mill. About 200 tons of ore will be handled daily. --The National LIBRARY of the City of Mexico has placed heaters in its reading room for the benefit of the public during the winter months. --A branch of the Peninsular BANK of Yucatan is to be established at Laguna del Carmen, State of Campeche. ---The new LIGHTHOUSE to be constructed at Coatzacoalcos has a range of 75 miles in clear weather. --Important documents relating to the settlement of TEXAS and California have been transferred by the department of fomento to the National Museum to be copied. The originals are to be kept in the national archives. --The branch RAILWAY in Michoacan connecting Ajuno with Zacapu, Penjamo, and other points has been opened to public traffic. --A company with a capital of a million pesos has been organized in the City of Mexico to exploit a FISHING concession on the west coast of that country. --The BUDGET of the State of Puebla for 1913 is 1,950,-139 pesos. --The bureau of agriculture has issued an order prohibiting the destruction of WHITE CRANES in the Territory of Quintana Roo. --Under a ruling of the department of public instruction the official school holidays of Mexico are February 5, May 5, April 2, and September 16.---A MONUMENT in memory of Gen. Escobedo

is to be erected in Monterey, State of Nuevo Leon. The forestry bureau has been instructed to plant TREES along the Federal wagon roads of the Republic. — The EXPOSITION at Colima is to be opened on March 1, 1913. Exhibits will be received until February 15. — The taxes of the TEXTILE manufacturers of the State of Puebla for 1913 amount to 62,000 pesos. — Beginning with January 1, 1913, the military and industrial school of Oaxaca became a CORRECTIONAL SCHOOL for children. — Press reports state that work is soon to be commenced on the Ojinaga to Chihuahua RAILWAY. — Arrangements have been made with the Salvador Steamship Co. (Ltd.), to route first and fourth class MAIL for Guatemala via Salina Cruz six times a month. Mail for Nicaragua and Salvador will also be routed via Salina Cruz. — The legislature of the State of Nuevo Leon has approved a plan for the establishment in January of the present year a SCHOOL OF ARTS AND CRAFTS at Monterey. — A new WAGON ROAD 40 kilometers shorter than the present one is being constructed between the City of Mexico and the city of Puebla, and will be finished in a short while. — The city of Mazatlan has opened an office, under the direction of the board of health, for the treatment of HYDROPHOBIA. — The city of Cordoba in the State of Veracruz has been authorized to negotiate a loan of 30,000 pesos at 8 per cent interest for the purpose of paying for the city waterworks. — The ELECTRIC railway between Xochimilco and San Gregorio has been completed. Work on the road from San Gregorio to Ameca is under way. The line when completed will connect the City of Mexico with Puebla. — The Mexican Government has been invited to participate in the ninth annual meeting of the International CONGRESS OF ZOOLOGY to be held in Monaco from March 25 to 31, 1913.



NICARAGUA

A recent order of the Government of Nicaragua provides that POLICEMEN in the City of Managua shall receive 300 pesos per month, inspectors 450 pesos, and commandants 600 pesos. Police clubs are furnished to the policemen of the Federal capital, but the use of firearms is prohibited. — The STEAMER *City of Sidney*, which anchored at Corinto on December 1, 1912, brought 4,536 packages of merchandise and a considerable quantity of correspondence. — Monseigneur Caghero, the PAPAL DELEGATE to Nicaragua, arrived in Managua early in December, 1912. — For the accommodation of the public and the betterment of the service POSTAL AGENTS have been placed on passenger trains running in

and out of Managua. --The Atlantic-Pacific RAILWAY Co. has been granted an extension of six months' time in which to commence work on the road from Rio Grande to Matagalpa.— The Government has established a TELEPHONE inspector's office in the western section of the Republic. Florencio Estrada has been placed in charge of the same. The Agricultural & Mining Co. of Nicaragua has been granted an extension of six months' time in which to commence the work of DREDGING the bar of the Rio Grande. If actual work has not been begun on the expiration of the extension of time referred to, this fact will work a forfeiture of the contract.— The following BONDED WAREHOUSES of internal revenue have been organized in connection with the National Bank of Nicaragua and approved by the President of the Republic: Chinandega, Felix Alfaro; Leon, Cesar Arana; Granada, Frutos Bolaños Chamorro; Carazo, Clemente Acevedo; Rivas, Alejandro Chamberlain; Bluefields, Belarmino Chaves; Matagalpa, Enrique Belli; Juigalpa, Wenceslao Calero; and in Ocotal, Pablo Gutierrez. TOBACCO WAREHOUSES and the agencies of same have been established in Managua and Masaya under the direction of Ramon Salaverri and Tomas Salaverri. All of the foregoing employees had to give bond before entering upon the discharge of the duties connected with their employment.—Dr. Rafael Ramirez Goyena has been appointed NATIONAL LIBRARIAN at Managua. A new PERIODICAL entitled "El Verbo Latino," edited by Dr. Buenaventura Cárdenas, is being published in Bluefields. --The Society of the Good Shepherd has been organized in Leon to found and maintain a house of CORRECTION AND LABOR. The house will be under the control of the Sisters of the Good Shepherd.—Extensive plantings of CORN in the Departments of Chinandega and Leon will greatly lower the abnormally high price of this cereal in Nicaragua at the present time. During the past year the price of corn in Managua rose to 60 pesos per 100 pounds. Large numbers of men, women, and children are now employed in harvesting the COFFEE crop in the highlands of the Republic. —The department of public instruction at Managua will expend 15,000 pesos in the purchase of SUPPLIES for the primary and grammar schools of the Republic.— The first SILVER CORDOBAS of Nicaragua were placed in circulation in December last. They bear the coat of arms of the Republic and the following inscription: "En Dios confiamos" (In God we trust).—Among the BANANA companies now shipping fruit from the Pearl Lagoon District are the properties of the Puerto Perlas Co. on the Wawashan River. Shipments from these properties in November and December amounted to as many as 10,000 bunches on one steamer. The Atlantic Fruit Co.'s farms also shipped during the same period about 10,000 bunches. The plantations on Mahogany Creek, Escondido, Cukra,

and Great Rivers are also producing considerable quantities of this fruit. — The Government of Nicaragua has ordered from Germany and France EQUIPMENT and supplies for the primary and normal schools of the Republic amounting to 40,000 marks. — In November, 1912, the National BANK of Nicaragua paid \$2,863,990.18 for account of the Nicaraguan Government. — Dr. Máximo H. Zepeda has been appointed MINISTER to Costa Rica, and Dr. Juan Manuel Siero, secretary of legation. — The gentlemen mentioned were delegates of Nicaragua to the Fifth Central American Conference which convened in San José, Costa Rica, on the first of the present year. — In 1911 there were SLAUGHTERED in the Republic of Nicaragua 31,468 cows, and 24,491 heifers, bulls, and steers. — The *American* of Bluefields states that a recent decree has been issued prohibiting the leasing of national lands to MAHOGANY hunters. — La Luz and Los Angeles MINES have established a commissary department at Prinzapulea from which point provisions and supplies will be furnished the mines referred to. — Thomas Burnus has been appointed civil instructor of POLICE at Leon with a salary of \$350 per month. — A law prohibiting the opening of stores, SALOONS, and liquor depots in Managua on Sundays became effective December 22, 1912.



PANAMA

The Weekly Star and Herald of Panama is authority for the statement that the PIERS or docks on the Atlantic side of the Canal are to be protected against storms by a mole or breakwater extending out in prolongation of the line separating the Canal Zone from Colon. They are to be 1,000 feet in length, 209 feet in width, and 300 feet apart. At present the Panama Railroad Co., to meet its own requirements, is engaged in building one of the piers, with a slip on either side, and a 1,000-foot wharf, together with the necessary length of mole or breakwater to afford protection. On the Pacific side the piers for commercial use will be placed at right angles to the axis of the canal, with the ends of the piers 2,650 feet from the center of the 500-foot canal channel. The piers will be 1,000 feet long and 200 feet wide, with 300-foot slips between the piers. — The National Assembly of Panama has passed a law providing that, in addition to the articles now on the FREE LIST, the following articles may be imported into the Republic without the payment of duty: 1. Plows, rakes, hoes, machinery for extracting roots, cutting, sawing, and planing timber, and agricultural machinery for drilling or sowing; 2. sugar manufacturing and refining machinery, machinery for harvesting and preparing coffee, cacao, rubber, and tobacco; 3. machinery for the preservation of fruits prepared in the Republic for export, or

machinery for the extraction of dyes and resins; (4) locomotives, rolling stock, rails, and other machinery for the construction and conservation of railways, and triturating machinery used exclusively in the construction and repair of highways; (5) machinery for boring for and the extraction of mineral oils, and shoe-manufacturing machinery; (6) machinery, instruments, and appliances for the preparation and conservation of meats; and (7) machinery for the manufacture of textiles, the boring of artesian wells, and for opening and maintaining in condition navigation and irrigation canals. A bill authorizing the city of Colon to negotiate a LOAN of \$50,000 for the erection of a city hall has been passed by the National Assembly.— Preliminary steps have been taken by the city council of Colon for the establishment of an electric TRAMWAY line in that city.— The Congress of Panama has passed a bill providing for the founding of SETTLEMENTS in the uninhabited parts of the Republic and for the civilization of the tribes of Indians in the interior of the country. An executive order applicable to the Canal Zone directs the Isthmian Canal Commission to acquire all lands within the said zone, paying private landowners the value assessed by the Joint Commission, the Panama members of which are the Hon. Federico Boyd and Mr. Samuel Lewis. — The Star and Herald of Panama states that beginning January 6, 1913, the Panama Railroad Co. will run SIGHT-SEEING TRAINS through the Canal for the benefit of tourists and others interested. The schedule provides for a trip over the Pacific division in the morning and through Culebra cut in the afternoon of Monday, Wednesday, and Friday. The principal features of the Canal work will be explained in a lecture delivered at the tourist station at Ancon and illustrated by the use of models. The trip over the work at Gatun will be made on Tuesday, Thursday, and Saturday. It is reported that another tourist observation car is being constructed at the Gorgona shops. Each car will have an official guide, and when both are in service it will be possible to take 150 persons over the work at one time. The whole work can be seen in two consecutive week days.— A company has been organized in Colon with a capital of \$100,000 to engage in the ELECTRIC light and ice business. It is reported that the machinery required will be purchased in New York.— In November, 1912, 3,686 persons entered the port of Colon, 1,574 of whom were cabin and 2,032 steerage passengers.



PARAGUAY

The BANK of Spain and America has decided to open a branch at Asuncion. The Government of Paraguay has recognized this bank as a juridic entity. — The new STEAMER *Mexico*, recently built in

Scotland for the Milhanovich Co. to ply between Buenos Aires and Asuncion. Paraguay has a displacement of 1,000 tons, a length of 250.2 feet, a width of 40.1 feet, and a depth of hold of 10.7 feet. The *Merico* is the same type of vessel as the *Dublin* and the *Edimburgo*, both of which are now engaged in the freight and passenger service between Buenos Aires and Asuncion. The same company has also received from Scotland the twin screw tug *Paeon* for service on the River Plate and its tributaries. This tug has a displacement of 286 tons, is 120 feet long, 26 feet wide, and 9 feet depth of hold. — The Government of Paraguay has been invited to participate in the following EXPOSITIONS and congresses: The Exposition of Ghent, the Ninth International Zoological Congress, which will meet in Monaco on March 25, 1913, and the Congress of Forestry to be held in Paris from June 16 to 20, 1913. — In November, 1912, the TOBACCO inspection office of Asuncion received 2,069 bales of tobacco for inspection and storage. The same office dispatched during that month 265,225 kilos of tobacco. The total revenues received from tobacco in the month referred to were 1,123.37 pesos. The stock of tobacco on hand in the revision office on November 30 last was 3,600 bales. During the past year the Agricultural Bank of Asuncion has made a special effort to encourage the cultivation of tobacco, and the area planted in this crop in 1912 greatly exceeded that of any previous year. The quality of the tobacco raised in Paraguay and the profits realized by tobacco growers in the Republic have been so satisfactory during the past year that a number of the principal growers have expressed their intention of increasing in 1913 the area of land devoted to the cultivation of tobacco. — It is reported that the new electric TRAMWAY service in the City of Asuncion will be inaugurated in May next. — On December 22, 1912, the cornerstone of the MONUMENT to be erected in Paraguari to "Christ the Redeemer," was laid, the President of the Republic and high officials of the church and State taking part. — In October, 1912, 662 persons made use of the NATIONAL LIBRARY at Asuncion, 147 of whom were foreigners. The total number of books consulted during the month referred to were 1,046. — A WHARF, a municipal building, and a model market are being constructed at Villeta. The two latter will cost approximately 50,000 pesos, and all will be completed during the present year. — In October last 53 immigrants entered the Republic of Paraguay, most of whom were Spanish, French, and Portuguese. — The country in the vicinity of Villa Rica is an important center of the TOBACCO-growing industry of Paraguay. The VALLEY of Manduvira, in which the town of Luque is situated, is one of the most fertile but least developed sections of Paraguay. A railway could easily be built from Asuncion to this valley, and such a line would do a large business in the transportation of timber, sugar cane, tobacco, bananas, rice, hides and skins, cotton, and numerous

other products. Tropical and semitropical agricultural crops do well in the part of Paraguay referred to, and the country is well adapted to the raising of stock, poultry, and fruits.— Sr. Francisco A. Viveros, a young Paraguayan artisan of Asuncion, has invented a receptacle to prevent the ADULTERATION OF MILK during transportation. — The consul of Paraguay in Santa Fe, Argentine Republic, has made an interesting report to his Government on the influence and work of PARAGUAYAN CONSULS in encouraging and developing trade with foreign nations, and especially the Argentine Republic, and the manner of increasing immigration to Paraguay. One of the measures recommended by the consul is the establishment of a permanent commercial exposition in Buenos Aires for the purpose of exhibiting Paraguayan products.— The Diario of Asuncion of October 30, 1912, publishes the tariffs now in force for the services of licensed RIVER PILOTS in the waters of the Republic. The Congress of Paraguay has recently given considerable attention to the questions of MONETARY REFORM, payment of the internal debt, and the encouragement and protection of domestic industries. In this connection the Government has contracted an ad referendum LOAN of £1,250,000, for the conversion of the public debt. Work has been commenced by the Central Paraguay RAILWAY on the first section of the branch line from Borja to Iguazu. This railway is to be built in sections of 25 kilometers each. The Central Railway is constructing a FERRYBOAT at Encarnacion to run between that point and Posadas.—The Agricultural Bank at Asuncion has ordered 10,000 PARAGUAYAN TEA PLANTS (Yerba mate) for the purpose of starting new plantations of this staple product of the Republic. A POPULAR LIBRARY has been organized at Asuncion, Dr. Rodolfo Ritte being one of the largest contributors to the support of same.—The consul general of Paraguay in Hamburg has been appointed special minister plenipotentiary of the Paraguayan Government for the purpose of signing the supplementary protocol of the international OPIUM CONVENTION at The Hague.—A company has been organized in Asuncion under the name of "Ganadería Sacarello" (Sacarello Stock Co.) to engage in STOCK RAISING in Paraguay and the Argentine Republic on a large scale. The capital of the company is 1,000,000 Argentine gold pesos.— The enactment of a HOMESTEAD LAW, similar to the one in force in the United States, and the establishment of a LAND COURT resembling the one in operation in Australia at the present time, is being agitated in the Republic. A RAILWAY has been surveyed from Concepcion to Horqueta, a distance of 50 kilometers, and a line 30 kilometers long is to be constructed from Concepcion to Loreto. —The QUINTA CABALLERO in Asuncion, the property of the celebrated Paraguayan general of that name, is to be sold. This private park, which

is situated near the center of the Federal capital, contains the finest collection of rare plants and trees in the Republic, and would be invaluable as a national or municipal park. The press of Paraguay is advocating that it be purchased for that purpose. — Sr. Ramon Lara Castro has been appointed MINISTER of Paraguay in Brazil. — Sr. Leo Hirsch, the consul of Paraguay at Vienna, has been decorated with the Order of the Great Cross of Austria. — Sr. Jose Rodriguez Alcila has been made director of EL DIARIO, an important daily newspaper of Asuncion with a large home and foreign circulation, and Sr. Francisco Growel has been appointed manager. — The Government of Paraguay was requested on November 5 last to allow the importation into the country of 14,000 head of Argentine CATTLE.

PERU

The MILITARY ACADEMY of the Republic of Peru at Chorillos, near the Federal capital, is divided into two sections, one of which is for instruction to students intended for the artillery, cavalry, and infantry service, while the other is for cadets, who after four years of attendance, enter the army as second lieutenants and ensigns. — During the year 1912 there were five times as many applicants for entrance to the military academy as the school could accommodate. — A school for machinists was added to the NAVAL ACADEMY of the Republic of Peru, at La Punta (Callao), in 1912. The naval academy has accommodations for 200 pupils. — A large 11-roller CANE GRINDING PLANT for the Roma Sugar Factory has been ordered from England. This plant will have a crushing capacity of 1,000 tons of cane per day of 24 hours and will consist of one Kra-jewski crusher, with rolls 28 inches in diameter and 72 inches long; three mills each having rolls 34 inches in diameter, the whole driven through heavy cast-steel gearing by one engine having a cylinder 34 inches in diameter and 60-inch stroke. Hydraulic pressure regulation will be fitted to the top roll of each mill. All-steel cane carrier, intermediate carriers, bagasse elevators, and mechanical juice strainers, and two duplex juice pumps will be included, also a 15-ton overhead traveling crane. This plant, when erected, will be the largest in the Republic of Peru. — Sr. Cesar Bentin has been appointed secretary of the legation of Peru in Great Britain, and Sr. Roman E. Leguia consul ad honorem at Brussels, Belgium. — A narrow-gauge RAILWAY is planned to connect Callao and Lima with Chilea, which is said to be the future military port of Peru. The bay of Chilea is a deep-water, protected harbor, and would make a fine naval or commercial port. — A CENSUS is to be taken of the city of

Lima in 1913. The population of the Federal capital in 1908 was 140,884, and it is quite probable that the census for 1913 will show a population considerably in excess of 150,000. The Federated Society of Shoe Manufacturers of the Republic of Peru, at Lima has petitioned the Government, through the President of the Republic, to increase the duty on IMPORTED SHOES to 3 soles per pair on shoes for adults and 2 soles per pair on children's shoes. The same society requests the opening of the State shoe factories for the purpose of manufacturing therein all the footwear used in the army, navy, and police departments of the country.—The Agricultural Syndicate of Chancay has petitioned the Government of Peru to permit the free importation of INSECTICIDES used in combating agricultural pests. At different times the cotton and other crops of the Chancay Valley have suffered from destructive insects, and the agriculturists of that section have organized to combat and, if possible, exterminate them. Charles Peterson has denounced for the Carmen Mining Co. the Erica COPPER AND SILVER mine, consisting of two claims situated in the mineral district of Huarochiri y Canta. La Prensa of November 25, 1912, contains an interesting article entitled "The Future of Eastern Peru," in which problems concerning the development of the great wooded region known as the "Montaña" are discussed.—It is estimated that the construction and equipment of a RAILWAY 200 kilometers long from Puno, Peru, around Lake Titicaca to Guaqui, would cost £800,000. In November, 1912, the Society of Agricultural Engineers in Lima published the first issue of a series of bulletins intended for scientific AGRICULTURAL PROPAGANDA of the resources of Peru. On December 1, 1912, President Billinghurst delivered a message to the Peruvian Congress recommending the renewal of diplomatic RELATIONS WITH CHILE. The history of the Chilean question will be reviewed in detail in the "red and white book" now being prepared by the department of foreign relations.

Arrangements have been made to establish a Peruvian line of STEAMERS for freight and passenger traffic to ply between Iquitos and New York. The plan comprises the building of extensive wharves and warehouses at Iquitos, and the service is to be extended to Colon and the Caribbean coast of South America. The first steamer to enter this traffic will be the transport *Iquitos*. The manager of the new company is Col. Pedro Portillo, with headquarters at Iquitos. Col. Portillo is an authority on eastern Peru and the Amazon region, and while prefect of the department of Loreto explored the rivers of that region and made a map of that Republic, which is said to be the most detailed and reliable map in existence of eastern Peru.—A project has been submitted to the Federal Congress for the building of a railway from Chilea to the Hatunhuasi

COAL mines. The Peruvian Congress has approved the revised plan submitted to it for the construction of a branch of the Lima to Huacho RAILWAY between Sayan, Oyon, and Checras. The San Juan Mining Co., of Chimbote, opened to public traffic in December last the RAILWAY between Tabones and Limeña. — A law of December 5, 1912, establishes the DEPARTMENT OF MADRE DE DIOS, the capital of which is port Maldonado. The total estimated area of the Department is 64,112 square kilometers. The estimated population is 16,000, about 10,000 of whom are nomadic tribes. The Department is divided into three provinces, as follows: Tahuamanu, with an area of 12,552 square kilometers; Tambopata, with an area of 25,178 square kilometers; and Manu, with an area of 26,382 square kilometers. The capitals of these provinces are, respectively, Inampari, Maldonado, and Manu. The new Department is under the jurisdiction of the Superior Court at Puno. A communication from the Pomalea Agricultural Society states that work was commenced in December last on the Pimentel RAILWAY between Pomalea and Chiclayo.

SALVADOR

The city of La Unión celebrated early in December the inauguration of an ELECTRIC LIGHT system, the occasion bringing the people to the streets and plazas of the city where the bands rendered inspiring music. For this great improvement in lighting the city the mayor, Don Santos Ulloa, and Don Paulino Carias are responsible and to whom the people are offering many congratulations. Diario del Salvador in the edition of December 16 contains large cuts of the PRESIDENT-ELECT of the United States and the late Vice President James S. Sherman. — The advertising columns of the same journal show that BUSINESS FIRMS in the United States are using considerable space in calling the attention of the people of Salvador to their products. — In order to better the RAILWAY SERVICE in Salvador it is reported that Sr. Spencer, manager of the Salvador Railway, proposes to establish quicker service by cutting out certain villages where traffic is very light: the train usually leaving Santa Ana at 7 a. m. daily will leave 15 minutes earlier and make the ordinary stops until reaching Sitio del Nino, from which place stops at a number of towns will be omitted, and the traveler will reach San Salvador at 9.45 a. m. instead of 11 a. m. as formerly. — The American consul in San Salvador reports that a night LETTERGRAM service was inaugurated in the Republic in October. The rates are: For the first 50 words, 22 cents; for each additional 10 words, 4 cents. — By an

executive order of October 19, 1912, effective one month later, importers of merchandise by parcel post must pay a SURTAX of 10 per cent of the amount of customs, unless such importers are already paying stamp and other local taxes. — COMMERCIAL TRAVELERS must pay upon their arrival a tax of 100 pesos (peso equals 45 cents) for a stay not to exceed two months; for a time in excess of that period a monthly tax of 25 pesos is to be paid by commercial travelers at the port of departure. It is further provided that all resident agents representing foreign concerns shall register their names and pay a monthly tax of 25 pesos. — The Republic of Salvador was represented at the FIFTH CENTRAL AMERICAN CONGRESS, which met in San Jose, Costa Rica, on January 1, 1913, by Dr. Rafael Meza. — The annual output of candles in the Republic of Salvador is, in round numbers, 60,000 boxes, which represent a weight of 132,000 kilos. — On December 2, 1912, the first number of a new DAILY PAPER entitled "El Mediodia" was published in the city of San Salvador. — A new SCIENTIFIC PUBLICATION, under the name of "La Tribuna Medica del Salvador" (The Medical Tribune of Salvador), published its first number on January 1, 1913. — The Government of Salvador has accepted the offer of the Government of Mexico to admit 13 Salvadorean students from 16 to 18 years of age to a course in the National SCHOOL OF AGRICULTURE of Mexico.

URUGUAY

A bill has been introduced into the Congress of Uruguay authorizing the purchase by the Argentine Government of a LEGATION BUILDING in Las Heras Avenue, Montevideo. The property is valued at about \$200,000. — A law has been passed providing for the reorganization of the divisions of LIVE STOCK and agriculture. — A BRIDGE 130 meters long is being built at Paso del Borracho over the Tacuarembó Grande River. The bridge is being constructed by the Government at a cost of about \$100,000. — It is proposed to hold a ROAD CONGRESS in Montevideo from March 1 to 20, 1913. — A bill has been passed creating the Institutes of Industrial CHEMISTRY, and of GEOLOGY under the direction of the department of industries. The installation of these institutes will cost about \$125,000, and the annual maintenance of same \$70,000, approximately. Some of the teaching staff has been obtained from the United States and England. — The customs receipts of the Government of Uruguay for November, 1912, were \$1,300,890, as compared with \$1,162,863 during the same period of 1911. — Unofficial reports from Montevideo are to the effect that the Government

of Uruguay proposes to establish a military **SCHOOL OF AVIATION** with an aerodrome attached. The school is to be near Montevideo, and the Italian aviator Cattaneo will be offered the directorship of the same. — The First Uruguayan **HORTICULTURAL** Exhibition was held in Montevideo in January of the present year. The vicinity of Montevideo is now one of the most attractive and remunerative fields in the line of horticultural work to be found in South America. The climate is excellent, the soil rich, and there is practically an unlimited market for vegetables and fruits at good prices in Montevideo and other Uruguayan cities. — The Portland **CEMENT** factory belonging to Wilson, Vicenti & Co. at Sayago, Uruguay, is in a flourishing condition, there being a large demand for the products of the factory in the Republic. — A bill has been introduced into Congress authorizing the purchase of the building and land in the town of San Jose where the First Constitutional and Legislative Assembly of the Republic was installed in 1828 for the purpose of conserving same as a national **HISTORICAL RELIC**. — An ad referendum contract has been made between the Government of Uruguay and the Central Railway Co. for the construction of a **RAILWAY** 120 kilometers long from Pampa station on the Northern Extension to Papagay Hill where the **MANGANESE** mines are located. The company is obligated to colonize 10,000 hectares of land along the line. The contract is subject to the approval of the Uruguayan Congress. — A law has been promulgated authorizing the issue of a monthly bulletin of the department of foreign relations. This bulletin will contain treaties, conventions, and protocols made with foreign countries, laws and decrees relating to the diplomatic and consular service, reports received by the department, and useful information and propaganda data. Sr. J. A. Frabosqui has been appointed director of the bulletin. — The amended **WINES BILL**, approved by the committee of the House of Deputies of the Congress of Uruguay, was published in the *Diario* of Montevideo on November 29, 1912. The bill forbids the sale of artificial wines, and prescribes that after six months all wines, whether foreign or domestic, shall not be sold except in closed and sealed receptacles. Under this measure an internal consumption tax is levied on imported wines, according to their alcoholic strength, of from one-half to 8 centavos per liter. — The director of the Uruguayan National Meteorological Institute has proposed to the Government of Uruguay a plan of wireless service for daily advising the **OFFICIAL TIME** by transmitting at a fixed hour a conventional sign to wireless stations on land and vessels in range at sea. By adding 3 hours 40 minutes and 5 seconds Greenwich time will be obtained. — The Government of Uruguay has accepted the invitation of the Government of Peru to participate in the Sixth Pan American Medical **CONGRESS**, the Fifth Latin

American Congress, and the International Exhibition of Hygiene, which are to be held simultaneously in Lima in August, 1913. Official delegates will be appointed in due course.—The South American Iron Syndicate (Ltd.) will establish a large **FOUNDRY** in Uruguay for the manufacture of steel and iron goods, such as rails, wire, girders, plates, and spare parts of machinery. The representatives of the company have taken up the project with the Uruguayan Government, and have arranged to invest at least a million dollars in the enterprise. The plans for the first section of the Paloma to Treinta y Tres **RAILWAY** have been approved and the work of construction authorized by the Government. This railway will be built under the Caprario concession recently transferred to the "Uruguay Railway Co." — A narrow-gauge **RAILWAY** $8\frac{1}{2}$ kilometers long is being built by Sr. F. Piria and forms the first section of the road from Puerto del Ingles to Cerro de Pan de Azucar. An ad referendum contract has been made between the department of public works and Furtado & Co., representing Toomey Bros. & Co., of New York, for constructing a **LIGHT TOWER** on the English Bank. An appropriation of \$20,000 has been made to cover the preliminary expenses incident to the work. — The Senate of the Congress of Uruguay has approved the Uruguayan-Argentine **COASTING TRADE CONVENTION**. — M. A. Lamme, formerly a professor in the University of Colombia and a North American geologist and mining expert, is doing **EXPLORATION WORK** in the departments of Montevideo, Minas, Maldonado, Rocha, Tacuarembó, Cerro Largo, and Rivera, accompanied by Juan Tremoleras, assistant director of the National Museum. Sr. Mario L. Gil, formerly **CONSUL GENERAL** of Uruguay in Baltimore, has been appointed consul general at New York, the consulate at Baltimore having been abolished. Sr. Richling, former consul general of Uruguay in New York has been given other important work connected with the Government.

VENEZUELA

The **SCHOOL OF ARTS AND CRAFTS** for women, established in Caracas under an executive decree of October 28, 1912, teaches, among other subjects, domestic hygiene, millinery, floriculture, printing, nursing, photography, washing and ironing, hat making, cooking, bookbinding, typewriting, bookkeeping, stenography, etc. The rules and regulations of this school, as well as those of the normal schools and schools of commerce, are published in the Official Gazette of December 19, 1912.—Sr. Hector Pererira Alvarez has been appointed **CONSUL** of Venezuela at Philadelphia, Pennsylvania, and Julio

Hardisson consul adhonorem at Santa Cruz, Island of Tenerife.

The SANITARY rules and regulations of the Federal Government recently issued are published in Spanish in the Official Gazette of Caracas of December 10, 1912, et seq. — During the first half of 1911 the RAILWAYS OF VENEZUELA transported 322,380 passengers and 125,429,555 kilos of freight, receiving therefor 6,846,931 bolivares. The total expenses of the railways during the period referred to were 3,478,911 bolivares. — Dr. L. G. Chacin Iriago has been appointed CONSUL of Venezuela at Southampton, England. — The Canadian Venezuelan Ore Co. has been authorized by the Federal Government to erect and maintain in operation two luminous BUOYS near the bars in the principal outlet or mouth of the Orinoco River. — The HIGHWAY between the port of La Ceiba and Sabana de Mendoza has been repaired and improved, 1,000 bolivares having recently been spent for that purpose. — Dr. Jose A. Tagliaferro has been authorized by the department of fomento to construct a TELEPHONE line in the district of Betijoque. — In addition to considerable quantities of skins and cabinet woods exported annually through the port of Carupano, the yearly shipment of COFFEE AND CACAO consigned to foreign countries from said port amount, approximately, to 100,000 sacks. A large coastwise trade in fish, corn, flour, etc., is carried on in the neighborhood of this port. — A contract has been made with the TACHIRA RAILWAY to extend its line to a point known as "Meseta de Cara de Perro," at which place the Tachira station will be constructed. Under a recent arrangement with the Tachira Railway Co. the Government of Venezuela agrees to pay monthly to the railway company 30,000 bolivares until the sum of 500,000 bolivares has been paid. The company agrees to expend 450,000 bolivares in building the extension referred to and 50,000 bolivares in defense and construction work on the right bank of the Catumbo River opposite the town of Encontrados. The railway is to be completed by December 31, 1913. — The Venezuelan Government has ordered from the Commercial Lithographing Co. of Caracas 12,000,000 internal revenue stamps of the denomination of 1 centime each. — Dr. Jose Ignacio Diaz Granados has been appointed CONSUL of Venezuela adhonorem at Santa Marta, Colombia.

The Government of Venezuela ratified on December 19, 1912, the Universal Postal Convention of April 6, 1906, relating to POSTAL MONEY ORDERS. The Gaceta Oficial of December 19 last reprints the law of November 18, 1912, making the importation of GOLD COIN free of duty. Formerly gold coin paid an import duty of 4 centimes per 100 bolivares. — The PARCEL-POST CONVENTION between Venezuela and Great Britain became effective on the part of Venezuela on the 1st of the present month in accordance with a decree of December 19, 1912. President

Gomez has ordered the construction of a TELEGRAPH LINE between Tucupido and Santa Maria de Ipire, a distance of 95 kilometers. The sum of 14,460 bolivares has been set aside to defray the expense of construction work. Other telegraph lines planned or in course of construction are as follows: From Bobures to Torondoy; San Carlos to El Baul; Trujillo to Valera, and from Castillos de Guayana to Piacoca. Rafael Sosa has been authorized by the Government of Venezuela to construct a TELEPHONE line 20 kilometers long between Tocuyo and Samare. An ELECTRIC TRAMWAY for passenger and freight service has been established from the wharf at the port of Carupano to the center of the town, a distance of about 2 kilometers. The electric plant adjoining the customhouse is to be enlarged and will be used for light and power at Carupano and vicinity. The LIGHTHOUSE at this port is 66 meters above the level of the sea. From March 16 to September 15, 1912, the Government of Venezuela spent 807,086.50 bolivares in the construction and adornment of PUBLIC BUILDINGS throughout the Republic. Mr. P. Jones, president of the IMATACA MINES, a Canadian corporation, recently inspected the mines for the purpose of introducing measures looking to the increased development of the same. The CONSUL GENERAL of Venezuela in New York has been appointed by President Gomez as delegate to the Fourth International Congress of School Hygiene which will meet in Buffalo, New York, from August 25 to 30, 1913. The Caribbean Coal Co. of New York has been organized, with a nominal capital of \$1,000,000, to develop the COAL MINES in the Paez District, State of Maracaibo. There are COCONUT plantations on the Golfo Triste in Venezuela which can furnish as many as 150,000 coconuts a month. The principal town of this region is Cumana, a center of the coconut industry, which in this part of Venezuela consists chiefly in the extraction of the oil from the nuts. The "Industrial de Manzanares," a large company engaged in the coconut traffic along the coasts of the Cariaco, Sante Fe, Mochima and Triste Gulfs, and the Manzanares River, has its headquarters at Cumana. The TELEPHONE line between Barinitas and Altamira has been completed, and work commenced to connect by telephone the town of Las Piedras with that of Timoteo. A recent issue of the "Universal" of Caracas says that in the States of Zamora, Yacay Lara, Carabobo, and Sucre as rich ORES are to be found as exist in the most favored mining zones of Chile and Mexico.



FEBRUARY 1913

BULLETIN OF THE PAN AMERICAN UNION

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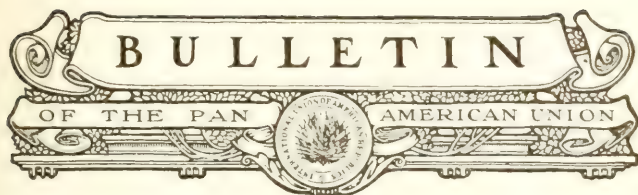
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¹ Absent.



THE LATE DR. MANUEL E. ARAUJO,
President of the Republic of Salvador.



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No. 2

EIGHTY DAYS WITH THE "BLUECHER" PARTY

IX.

BAHIA AND PARÁ, TWO GREAT PORTS OF BRAZIL.

AN uneventful run of about 60 hours from Rio de Janeiro brought us to anchor at 7 a. m., March 20, in another splendid Brazilian harbor, the "Bahia de Todos os Santos," or, in plain English, the "Bay of All Saints."

On the eastern side of this fine, deep, land-sheltered gulf clusters the third largest city of Brazil, São Salvador, better known throughout the world perhaps as Bahia, the capital of the great State of that name and once upon a time—for a period covering something like two centuries—the seat of government of the great Portuguese colonial possession of Brazil.

It was founded in 1549, some 58 years earlier than England's first attempt at colonizing in the northern hemisphere, and hence boasts of being the oldest city in Brazil. During all these years it has been a place of prime commercial importance, a center of art and learning, and the home of some of the oldest and finest Catholic churches in the Western World.

Had we not so recently left the most beautiful harbor in the world—that of Rio de Janeiro—our first view of Bahia would undoubtedly have surprised us with its remarkable beauty and picturesqueness. On a high bluff, amid the green foliage of a profusion of tropical trees, are seen tall church towers and glistening monuments set in among houses of varied hues, all more or less jumbled

together and apparently pushed on toward the bay until they have spilled over the edge and filled up the space between the hill-side and the sea in a compact mass of buildings. The city is thus divided into the "lower" and "upper" town, and its likeness to a crowded amphitheater reminded us of Valparaiso.

Upon landing we found that access to the upper half of the city was had by means of three large elevators, two of which were found to be the products of a well-known manufacturer of the United States. One hundred reis, or about 3 cents, was the charge for being "lifted" from the lower to the upper city.

A number of special cars awaited us at the top of one of the elevators, near the Praça da Constituição, but before getting aboard we took a look at the former governor's palace. This had been a



VIEW OF BAHIA, BRAZIL.

For two centuries of the time that Brazil was a colonial possession of Portugal, Bahia was the seat of government. It is now the greatest cacao port of the country, while tobacco and its manufactures form a growing industry, and rubber and coffee are large items in its list of exports. Its population is 285,000.

fine, imposing building, but owing to a recent little misunderstanding between two political parties had been shot full of holes, its interior burned, and now presented a somewhat "the-worse-for-wear" appearance. Not far from this place, in the Largo Quinze de Novembro, is the fine Catholic cathedral, a large and splendid edifice. At the end of the street passing the cathedral, and about a square away, is one of the oldest and richest churches of Brazil, the church of São Francisco, founded in 1587. The present structure was completed in 1713 and is noteworthy for its fine interior. The ceiling, walls, altar, etc., are all profusely decorated with carved scrolls, curves, coats of arms, heads of cherubs, and other ornamentation, much of the fine carving being heavily gilded, giving a wonderfully rich effect of glittering gold in the subdued candlelight.



VIEW OF BAHIA, BRAZIL.

The upper portion of the picture shows the hillside, and the lower portion shows the city. It is noted that the finest residences and public buildings and over a hundred churches are located. Near the center of the picture may be seen one of the elevators, by means of which communication between the two portions of the city is maintained.

Connected with this church, and immediately at its side, is the Franciscan monastery. The ceiling and altar of the little chapel present more fine specimens of the wood-carver's art. An artistic feature of the patio walls, as well as the walls of the church near the entrance, is the decoration in blue and white tiles, the work of Dutch artists, presented to the church by King Philip IV of Portugal. The tiles are skillfully fitted together and present a beautiful pictorial display of Biblical scenes, pictures representing the seasons of the year, historic battles, etc. A few of our party visited this interesting place during the afternoon and were most kindly and courteously received by the friars, one of whom conducted us through numerous rooms of the monastery and, among other objects of interest, showed us the life-size, handsomely dressed wax figures of some thirty or more saints, which are kept in locked closets and utilized on the certain days set apart for the worship of each.



Photo by Dr. M. Haezel.

BAHIA, FROM THE BAY

The picture shows the water front and the long, not steep incline, by means of which, crosses lead to the upper parts.

Our cars took us through various winding, quaint, and crooked streets, bordered by houses of varying shades of pink, blue, green, yellow, brown, and buff, many of them set in fine gardens of trees, from the branches of which hung luscious oranges, yellow lemons, and green mangoes in profusion. Flowering trees and shrubs and all the glorious flora of the Tropics abounded here, and the writer was involuntarily reminded of the opening lines of Mignon in Goethe's "Wilhelm Meister":

Kennst du das Land, wo die Zitronen blühn,
Im dunkeln Laub die Gold-Orangen glühn,
Ein sanfter Wind vom blauen Himmel weht,
Die Myrte still und hoch der Lorbeer steht?
Kennst du es wohl?

Dahin! Dahin!

Mocht' ich mit dir, O mein Geliebter, ziehn



VIEW OF MUNICIPAL BUILDING, RABAT, ALGERIA

A more or less intelligible translation of which is:

Knowest thou the land wherein the lemon grows
Midst darkened leaves the golden orange glows;
A gentle wind descends from bluest skies,
And myrtle green with highest laurel vies.
Dost know it well?

O, there! O, there!
Would I with thee, O my beloved, fare.

Speaking of oranges, reminds us that Bahia is the home of one of the most delicious varieties of that most delectable fruit known to the discriminating palate of the epicure—the seedless navel orange. It was from Bahia that the Department of Agriculture of the United



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VIEW OF BAHIA, SHOWING LOWER SECTION.

"On a high bluff, amid the green foliage of a profusion of tropical trees, are seen tall church towers and glistening monuments set in among houses of varied hues, all more or less jumbled together and apparently pushed on toward the bay until they have spilled over the edge and fill up the space between the hillside and the sea in a compact mass of buildings."

States Government secured the first six seedless orange trees from which have sprung the thousands of acres of trees which now form such an important item in the orange production of California and Florida.

We stopped at Cape Barra, on which was the old fort which had formerly guarded the entrance to the bay, but which has now been converted to the more peaceable and probably more profitable use of a lighthouse. That a lighthouse is needed here was evidenced by the remains of two wrecks which were still visible not far from the shore. One was that of a French steamer which had been wrecked here about 10 years ago and the other, not a pistol shot off the rocky

this time our palates had been educated to the delicious, tart taste of this luscious fruit, until with many it had become the most highly prized of all the tropical products. Some day the writer hopes to revisit Bahia, and when he does he will proceed to test his capacity as to mangos.

Upon our return from Rio Vermelho we had a long ride on the cars through the eastern section of the city and its environs, where we enjoyed magnificent views of green hills and valleys covered with tropical vegetation. In the outskirts of the city we passed hundreds of colored women engaged in washing. The clothes were being washed in the little stream, occasionally widening out into small lakelets, along whose banks the electric railway is built. We saw but



Photo by F. M. Hazlett.

CITY OF PARA FROM DECK OF STEAMER.

"The city of Para came into full view and we were most agreeably surprised at the scene presented by the greatest rubber port of Brazil. Its multicolored houses, characteristically tropical in their environment, looked clean and fresh, and the city appeared inviting."

few washtubs and no clotheslines, but all the linen of Bahia seemed to be spread out on the small bushes and acres of clean, green grass to dry.

Bahia is eminently a city of churches, there being something over one hundred within the city limits. Quite a number of parks and many fine monuments add to the attractiveness of the place. The Passeio Publico is one of the finest parks, and the weary may rest here, shaded by the green foliage of the mango trees, whose delicate perfume fills the air. One of the finest monuments is located in the Largo Duque de Caxias. It is a tall shaft of white marble surmounted by the bronze figure of an Indian, and commemorates the date of the national independence of Brazil. Around the base are grouped

colossal bronze figures representing in allegorical form the great rivers of the country. Another beautiful monument is in the center of the Praça Riachuelo, a marble pillar surmounted by the flying figure of the angel of victory, commemorating the Brazilian triumph over the Paraguayans in the long war of 1864-70.

One noteworthy characteristic of the monuments we saw in Bahia is that none was individual in character, but each represented or commemorated some historical event in the history of the country, giving striking evidence of the exalted patriotism of the people.

Bahia is the great cacao port of Brazil, furnishing about one-fifth of the world's supply. Tobacco, too, forms one of its important prod-



VISCONDE DE RIO BRANCO SQUARE, BELEM STATE OF PARA PLAZA

For names of the cities in the present Republic, consult the geographical dictionary. The names of the cities in the present Republic of the State of Para are: Belém, Ananias, and Belém. Its present population numbers about 185,000 inhabitants.

ucts, and good cigars are manufactured and exported to Argentina and other South American countries. We found that we could buy cigars of excellent quality much cheaper here than at any of our other stopping places, and quite a number of our party provided themselves with sufficient quantities to last until our return home. Coffee and rubber are also important exports of Bahia.

As an educational center Bahia has taken very high rank for many years, and many of Brazil's most noted poets and literary celebrities have come from its institutions, as have many of her learned scientists and educators. A large and well-attended normal school, one of the

leading medical colleges of the country, a noted law school, and a college of fine arts, second only to that of Rio de Janeiro, are among its most famous institutions.

We left Bahia just as "the shades of night were falling fast," and our last view of the city was striking. The sun, sinking behind the mountains in the west, gave a golden tinge to the picturesque city, and the splendid color effects in the light and filmy clouds formed a gorgeous canopy for the bay and its environing landscape. As we steamed out of the harbor the electric lights of the city came on and showed in a long, narrow girdle where the lower portion lay, while apparently suspended high above it were the street lights in rows, with here and there brilliant clusters, marking the parks and public buildings of what appeared to be an aerial city. In a half hour or so these lights had passed from view, and only the winking lighthouse on Cape Barra was left to remind us that Bahia was a reality and that the interesting things we had seen were more than a passing dream.

We were scheduled to arrive at Para at noon, March 25, but rain and fog delayed our vessel in that arm of the Amazon known as the Para River. The port, whose somewhat extended name is Santa Maria de Belem do Pará, is usually called Belem (Bethlehem) by the Brazilians and Para by the rest of the world generally. It is situated something like 100 miles up the river, but is none the less an Atlantic port. The Amazon River, however, has several "Atlantic" ports somewhat removed from the ocean. Manaus, one of Brazil's great ports, which is visited by ocean vessels from perhaps every maritime country in the world, is only 1,000 miles from the river's mouth, while 2,000 miles farther still we find Peru's Atlantic port, Iquitos. In comparison with the Amazon our boasted Mississippi is but a fair-sized creek.

One little difficulty about navigating the river up to Pará is that the river persists in shifting its channel from time to time, owing to the immense amount of sand and detritus washed down from the many square miles of territory it drains. This necessitates the employment of skilled pilots to steer the incoming steamers into the harbor. Our very careful captain, after steaming very slowly through the misty rain and fog for two hours or more, finally anchored and awaited the pilot, who climbed aboard about noon. A little later the rain ceased, the fog lifted, and we enjoyed fine views of the ever-changing panorama of the south bank as we steamed up the river.

The air was now cool and pleasant, and as the sun, which had considerably hidden until about 5 o'clock, sank lower on the horizon its golden rays painted the magnificent foliage of the wooded shore in varying shades of green and gold. Occasional clusters of bright-colored houses, with here and there a tall church spire, relieved the monotony of the scene. Little fishing boats, whose sails varied in color from white through all the rainbow hues, were seen on every hand and added their quota to the picturesqueness of the views.

About 6 p. m. the city of Pará came into full view, and we were most agreeably surprised at the sight presented by the greatest rubber port

PLAZA DE LA ALFONSO DE AGUIAR PARA BRASILE





CATHEDRAL, PARA BELEM, BRAZIL.

The building itself is heavy and grave. It was erected in 1771, and is of a pattern very common to many Portuguese structures of the eighteenth century. The interior, brighter and full of color, has a fine altar of marble and a great organ. The cathedral faces the Frei Caetano Brandão Square, named after the local patriot who founded the first hospital in the city.

of Brazil. Its multicolored houses, characteristically tropical in their environment, looked clean and fresh, and the city appeared so inviting that many of the tourists boarded a little steamer that came out to where the *Bluecher* was anchored and spent an hour or two sightseeing by electric light.

Pará, which dates its beginning back to 1616, is genuinely tropical. It is less than a degree and a half from the equator, but greatly to our surprise the night was pleasant. We had been told of the millions of mosquitoes we might expect, and mosquito netting had been provided for our staterooms to protect us against the notorious *Stegomyia calopus*, with its yellow-fever-distributing propensities, but somehow the millions failed to find their way out to the *Bluecher*. The writer, for one, failed to see or hear a single one of the little pests.

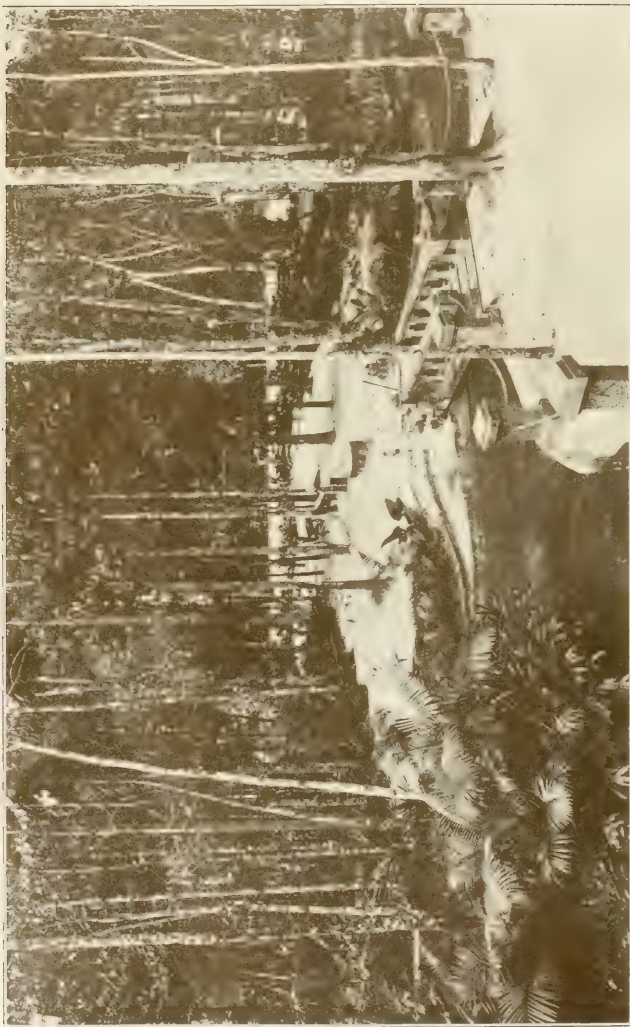
It may seem strange to those unacquainted with the peculiarities of tropical regions, but the fact is that the climate of Pará is not only equable, but most of the time delightful. During the hottest season of the year the temperature rarely exceeds 90° F., and the coldest is seldom below 70° F. The thermometer readings for March 26, the day we spent there, were as follows: 6 a. m., 78° F.; 9 a. m., 78° F.; 1 p. m., 80° F.; 4 p. m., 80° F.; 10 p. m., 80° F.

Almost daily showers and constant sea breezes keep the atmosphere from becoming oppressive, and the proximity of the forests gives it unwonted purity. Sanitary conditions in the city have been vastly improved, and the usual tropical diseases are easily preventable by the use of ordinary hygienic precautions.

We anchored about a mile from the new quay, recently completed by the Port of Pará Co., and were taken to the landing in a little double-decked steamer. The first thing of interest we saw was rubber—rubber everywhere along the street on which front the great warehouses where this product is handled for export. Hundreds of men, white, black, and all the shades between, were busy cutting open the great pelles, or balls, preparatory to packing the crude product for shipment. Pará exports about \$10,000,000 worth of rubber in one year, and to give the reader some idea of the importance of the port it may be stated that in 1910 no less than 1,969 steamers and 1,668 sailing vessels entered, the total tonnage being 1,425,601. Its foreign commerce for the same year amounted to \$29,940,918 of imports and \$48,163,052 of exports.

The trolley ride took the *Bluecher* party through the principal streets of the city. These were found to be straight and unusually wide, bordered by shade trees in profusion and kept remarkably clean. It seems that a large force of men is employed to sweep the streets with broad palm branches early every morning, and all refuse is carted away, while the daily rains give them a subsequent bath.

The Parque Affonso Penna was the first stop, and two of the handsome buildings fronting it, the city hall and the Governor's palace,



A VIEW IN THE MUNICIPAL PARK, BELÉM, PARÁ, BRAZIL.

This marvelous section of Amazon forest was preserved as a public park by the municipality of Belém when the expanding city commenced to encroach on the surrounding country. Greenhouses, ponds, cascades, lakes, fountains, and other artistic embellishments have been added, and at night its area is lighted electrically. The

were inspected. Not far from here is the old cathedral whose foundation was laid in 1748 and whose ornate and elaborate interior is probably not excelled by any church in Brazil.

The Bosque Municipal is the largest and most interesting of Pará's many parks, for it is merely a great slice of the primeval Amazonian forest which extended close to the city. Here are hundreds of varieties of trees representing the natural growth of the forest without the intervention of man, flowers just as they grow in the jungle, and man's handiwork is seen only in the walks and roads and occasional benches scattered through the woods. We were told that there were over 100 varieties of palms alone, and several hundred varieties of other tropical trees to be found here. Near by is the orphanage and trade school for boys.

As in all the Latin-American cities we had visited, the theater is one of the show places of Pará. The Theatro da Paz is located in the Parque João Coelho, formerly known as the Largo da Polvora, is spacious, airy, beautifully finished and decorated in its interior, and excellently adapted to its purpose.

One of the beautiful residence streets of the city is called "Nazareth," and here may be found fine specimens of Portuguese architecture, charming villas set in gardens such as are seen only in the Tropics, shaded by great palms, mango trees, cottonwood trees, and many varieties of flowering shrubs.

Of all the places visited, however, the writer's interest and admiration were most aroused by the Museu Goeldi. This is a botanical garden, a museum of ethnology, and zoological garden combined. It is under the direction of Dr. Jacques Huber, one of Brazil's leading scientists, whose reputation as a botanist extends throughout the scientific world.

It seems a pity that a fine stone edifice, commensurate with the importance of the institution and roomy enough to house and properly display the scientific treasures it owns, has not been erected for its home. As it is, its priceless collections are now crowded into a building which was once a country residence, a frame structure which might easily be destroyed by fire, and thus cause the loss of the fruits of many years of study and of toil.

The building is set in the midst of fine specimens of hundreds of varieties of trees and plants peculiar to the Amazonian forests, arranged according to their genus. Of the greatest of all rubber trees, the *Hevea brasiliensis*, the finest collection in the world may be seen here, while the experimental garden, designed for the experimental cultivation of the many plants having a commercial value, contains probably every known species of Brazilian rubber trees known to exist. Many rare species of palms, Pará nut trees, the tonca bean, and many other fruit and timber trees are also to be found. In an artificial lake we saw the finest specimens of the *Victoria regia*, the gigantic water lily of the Amazon, that the writer has ever seen.

To the average visitor, however, the archaeological and ethnological features of the museum and the zoological department present the most interesting features. In the first room we entered were found extensive collections of pottery of the extinct Indian tribes which had inhabited the region along the mouth of the Amazon at the time of the Portuguese discovery. Interesting relics, such as funeral urns and pottery from the mounds of the island of Marajó and other sections, were also a part of this collection. Valuable ethnological specimens from the Amazonian Indians, especially from those tribes inhabiting the Rio Tocantins Aragnaya regions, consisting of all manner of primitive weapons and utensils, were exhibited. Among these is a war canoe too large to be housed, and consequently left out in the yard near the house, which was made by the Carajas Indians



THE "MUSEU GOELDI" PARA, BRAZIL.

Building, which is a large Brazilian country house, is located on the Avenida Esch. In open front is a botanical and zoological garden occupying about 10 acres.

from the single stem of the cedro tree, and is 60 feet long and about 3 feet 4 inches wide.

In the zoological department may be found a remarkable collection of the fauna of Brazil. A complete series of Amazonian monkeys and a wonderfully rich collection of birds; specimens of the larger mammals—such as the tapir, black and spotted jaguar, capivara, ant-eater, etc.; a splendid collection of insects, containing monstrous butterflies and moths, beetles, and wasps of an infinite variety, all scientifically arranged and classified, form parts of the exhibit in the building. In the grounds are found the living specimens of the fauna of the country. A large aviary houses a collection of aquatic birds of many varieties, while in the trees and on artificial perches parrots

and toucans of every size and hue strut and screech and show their gorgeous plumage.

A cage of reptiles containing huge alligators and monstrous specimens of the anaconda and the *Boa constrictor*, and a tank which contains specimens of the electric eels, one of which is 6 feet 8 inches long, attracted our attention. Jaguars, pumas, ocelots, foxes, and many other specimens of Brazilian mammals were all about us in cages, and it was with much regret that we left this interesting place without having seen a tenth of its treasures. Just before embarking on the little steamer which was to take us out to the *Bluecher* we paid a hasty visit to the market, which skirts around a sort of basin, or inlet, in which are crowded all manner of fishing boats and small craft, with their many-colored sails and dusky occupants. Every



AVIARY IN THE ZOOLOGICAL GARDEN, PARÁ, BRAZIL.

Near the entrance to the garden of the Museu Goeldi the visitor encounters a large aviary occupied by a fine collection of aquatic birds, including specimens of beautiful white herons, night herons, grebes, spoonbills, boatbills, and various kinds of ducks.

conceivable tropical fruit is offered for sale, fish of all sizes and kinds, earthenware and dishes made of gourds by Indians, purses made of seeds strung on threads and other curios were to be had, but our time was too limited to see as much as we wished.

A little after noon the *Bluecher's* whistle awoke the echoes in farewell, and soon the picturesque houses, the tiled and stuccoed churches, the tall palms, and waving mangoes formed a charming picture, which grew less and less, and we were once more out in the channel of the Pará River, waiting for the pilot to take us out into the ocean. We anchored for the night, and it was not until the next morning that we finally bade a long farewell to the great Republic of the southern hemisphere—Brazil.

FUTURE FARMING IN CUBA

THE late presidential election in Cuba was conducted in a manner that would have done credit to any Republic in the Americas. The voting was performed without the slightest disorder, and the result distinctly expressed the popular will. The advance toward able and wise self-government which has been made in Cuba since the island became independent is truly remarkable when gauged by an appreciative understanding of the difficulties which lay in the way of progress. Political conditions have greatly improved and there is a tendency in the right direction. The people are becoming constantly less susceptible to the appeal of agitators, and the Government is displaying ever-increasing power to deal promptly and effectively with annoying situations.

With the establishment of order and the consequent creation of confidence among capitalists Cuba will enter upon an era of industrial expansion and widespread prosperity—a state which shall involve the welfare of all classes. The conditions that are creating Cuba's opportunity have been in the making for many years, and are now growing acute. In the United States and the manufacturing countries of Europe the demand for foodstuffs is pressing hard upon the supply. Increase of population is outstripping increase of farm products. Nations which in the past have been great exporters of meat and cereals are steadily shipping less, and before long will have become importers.

Latin-American countries are finding ever-expanding markets for the yield of their soil. Lying directly in the principal Panama Canal routes, Cuba is singularly well situated to play a prominent part in meeting this growing demand. It is hardly necessary to add that her wonderfully rich land and splendid growing climate give her unsurpassed advantages in the matter of production. The island is capable of almost unlimited development. Sugar and tobacco are the products which are to-day scientifically cultivated and raised in adequate quantities. Less than 15 per cent of the arable land is turned to good account, and little of it is worked to its utmost possibility of production. Even in the leading industries, where the manufacturing methods have been well-nigh perfected, there is room for improvement in the field processes. Vast, as is the value of Cuba's annual output, much less than one-fourth of her resources have been



HARBOR AND WATER FRONT AT HAVANA, CUBA.

Of the \$10,000,000 worth of foodstuffs purchased by Cuba annually, considerably more than half of this quantity consists of products that might be raised on the island itself.

developed. With well directed effort and the aid of capital the island may be made within the life of a generation to treble its present yield from the soil and to support in comfort a population of 5,000,000. And this would be but a moderate measure of its ultimate possibilities.

The potential development of agriculture in Cuba has been overshadowed by its two dominant industries and discouraged by the methods of farming prevalent on the island. Misconception has been induced by the failures of colonies and individual settlers, the former promoted under unfavorable conditions and the latter having undertaken tasks for which they had neither aptitude nor sufficient means. Successful farming in Cuba, as elsewhere, necessitates previous experience, knowledge of local conditions, and adequate capital. A great majority of failures are traceable to lack of one or more of these requisites.

A glance at the list of Cuban imports reveals a peculiar economic state which will doubtless receive the careful consideration of economists and statesmen.

Upward of \$40,000,000 worth of foodstuffs are purchased by the Cubans annually. Considerably more than half of this quantity consists of things that might be produced on the island. More than that, several of the items in question represent products which might be raised in Cuba to an extent sufficient to supply the domestic demand and leave a considerable surplus for exportation. This is, of course, only contemplated as an ultimate possibility. Let Cuba aim for the present at filling the demands of her home markets for such products as may be raised within her borders.

Except for the heavily capitalized corporations which are engaged in the sugar and tobacco industries, agricultural effort in Cuba is confined mainly to individual natives and foreign settlers. The Chinese truck gardeners are an important factor in furnishing vegetables to the local market and demonstrating what may be done by intensive cultivation.

The natives farm in a primitive manner, under what may be called a "system," because the same practices are prevalent throughout the island. They are not as haphazard as they appear to be, but are, in fact, the intelligent result of experience of the easiest way of procuring a subsistence from a small patch of land. The *guajiro* has had neither the knowledge nor the inducement to make his land more productive. Until recently there was no market open to anything that he might have produced and only the most limited means of transportation. Now there are excellent roads and extensive railway lines, both constantly on the increase. There is no doubt but that when he is taught how to produce a larger crop and assured of a sale for his surplus he will make the required effort. But before this is asked of him there must be an adjustment of land tenure. Lease-



ROAD CONSTRUCTION IN CUBA.

Extensive road building has been going on throughout the island and has rendered transportation facilities more adequate. This, in turn, should afford greater opportunities for profitable farming.



A COUNTRY ROAD IN CUBA.

Such roads, coupled with the wonderfully rich land and splendid growing climate, give to Cuba exceptional advantages for increasing her agricultural products.

holds should be as often as possible perpetual and on terms which will preclude the possibility of rents being unduly raised as the profits of the tenants increase. The system of land taxation should be regulated so as to encourage improvement, lying most lightly upon the enterprising man and falling most heavily upon the owner of idle property. It would be the part of wisdom to exempt the small cultivator entirely from direct taxation. Under existing circumstances he contributes his full share of the revenues through the medium of his purchases of imported articles. The Government should establish an agricultural bank to furnish moderate credit at feasible rates of interest. There is every reason to believe that the success of such a measure would be as great in Cuba as it has been in Egypt. The conditions of farming are much more favorable in the former country than in the latter. His midday rest is well earned by several hours' work in the field before the city dweller has taken his early coffee.

The chief essentials to the improvement of Cuban farming are at hand. The problem is to turn to account resources which are now being wasted or improvidently used. Fertile land and a genial climate are amply available. The necessary complement to these is the cessation of "cultivation by exploitation" and the adoption of cultivation with conservation. The Cuban farmer must be induced to care for his land and to make it profitably productive. He will respond to stimuli if intelligently applied to him. Show him the way, furnish him the means, and give him assurance of a reward for exertion and he will acquit himself creditably in a short while.

The Cuban may not be easily moved by theoretical argument, but he is peculiarly susceptible to the force of an object lesson. Give him a concrete example of how he may increase his crops by intelligent treatment of his land, and with little more effort than he expends upon getting a bare living from it, and he may be depended upon to act on the suggestion.

This is a work which should be carried on by the Government, the railroads, and the land companies. It must be pursued in a practical manner, bringing the lessons right home to the man to be educated. Even in the United States, where the intelligence of the farmer is of a high order, the influence of experiment stations and railway demonstration cars is immeasurably greater than that of scientific books.

Efforts on the part of the Government and other agencies to promote general agriculture can not fail to attract to Cuba the immigration necessary to the fuller development of the country. It contains abundant land that may be cultivated with less outlay and greater yield than the average irrigated land of the western United States. The Cuban enterprise will also return a larger profit on investment under the advantageous conditions which are con-



TYPICAL "COLONY HOUSE" OF AMERICAN AND CANADIAN CITRUS FRUIT
 GROWERS IN EASTERN CUBA



AN EXHIBIT OF CITRUS FRUITS AND VEGETABLES RAISED IN THE PROVINCE
 OF CAMAGUEY, CUBA

The island is capable of almost unlimited development, yet less than 15 per cent of the arable land
 is turned to good account, while little of it is worked to its utmost possibility of production.



VIEW OF THE TROPICAL LAND IN THE VALLEY OF THE RIVER

with the river in the foreground
on the left side of the page

templated, provided the cultivator exercises discrimination in the selection of his crops. Heretofore foreigners taking up agricultural pursuits in Cuba have bought high-priced acreage and engaged in citrus fruit growing or some form of fancy farming, generally with unsatisfactory results. It has been demonstrated that comparatively cheap land, such as is available in every Province of the island, can be made to produce large crops of staple foodstuffs with regularity and great profits.

A few illustrations will suffice to indicate the field of opportunity open to the small farmer in Cuba.

Nearly a quarter of a million dollars is paid annually by the islanders for foreign potatoes of a quality inferior to those which they raise at home. Indeed, the best Cuban potatoes rival the famed product of Bermuda. This should be an article of export from Cuba, as well as various spring vegetables, for which there is practically unlimited demand in New York.

Another costly item of import is corn, or maize. Experiments have proved that excellent results may be had with this cereal on ordinary Cuban land. At present it is raised only for use as fodder. The crop is deficient in quantity and poor in quality. With reasonable care in seed selection and cultivation, including rotation in planting, corn may be grown upon comparatively cheap land and marketed at a handsome profit.

There are thousands of acres of land in Cuba lying idle or earning less than 5 per cent a year on \$20 an acre that could be made to produce two heavy crops of alfalfa every year. This fact, among others of a similarly significant character, has been established by the test work of Prof. Karutz at the Camaguez experiment station of the Cuba Railroad. Alfalfa is not raised at all in Cuba at present, while the island pays about as much annually for imported hay as it does for potatoes, and it is an expensive commodity in Habana and other cities.

General agriculture in Cuba offers a promising field for corporate enterprise. The story of the banana industry is indicative of what may be done in other directions. There was no shipment of this fruit from the island until the United Fruit Co. established the industry but a few years ago. Now the United States buys upward of \$1,000,000 worth of Cuban bananas yearly.

A corporation entering upon agricultural development in Cuba should command ample means and the services of a manager thoroughly familiar with crop conditions on the island. A man who is reckoned as one of the most expert in practical Cuban agriculture, and one of the most conversant with the conditions of it, expressed to the writer the conviction that a company investing \$100,000 in



THE DOCKS AT DARTFORD THE NORTH EN CLIMENTS OF THE GREAT EASTERN RAILWAY

1,000 acres of land and having as much again for working capital should, under proper management, earn from \$40,000 to \$50,000 net annually. This proposition was indorsed by three other men of similar reputation.

The suggested method of operation for such a company contemplates the leasing of its land in small tracts to be cultivated under its direction. The company would furnish each tenant with a dwelling, implements, seed, and other necessities, after the manner of the Canadian land corporations, which are attracting so many Americans to the Dominion. These concerns will put the moneyless man in possession of a fully equipped farm and a furnished home if he can satisfy them of his capacity as a farmer. It is believed that a somewhat similar method of colonization might be practiced with success in Cuba. In the plan for the latter country, however, the same degree of independence is not proposed. It is suggested that the tenant farmer should devote his holding to such crops as the company's manager might direct, and that the corporation should harvest and market the output, allowing to the cultivator a certain percentage of the net proceeds.

There are sufficiently numerous examples of shining success to prove that farming in Cuba may be made highly profitable. And this is the conclusion to which an intelligent survey of all the relative conditions must lead. When efficient farming becomes the general practice instead of the exception, the island will be the most productive area in the world of its size.



THE ATHENEUM OF COSTA RICA

RECENT activities of the Athenaeum at San Jose, Costa Rica, have directed public attention to the work of this organization, which for several years past has been an important and influential factor in the intellectual culture of the country.

Going back to its beginning in May, 1907, it is seen that the movement originated in the person of the distinguished writer and ex-assistant secretary of public instruction, Don Justo A. Facio, who sought to bring together congenial and cultured people for the purpose of stimulating study along the lines of science, history, literature, and art. In a word, to delve deep into the problems of the day and deduct therefrom something that benefits and refines and thereby contributes to the general progress of the country.

How well this important organization is fulfilling its mission it is only necessary to look back over its short life to see some of its notable steps.

In commemorating the ninety-first anniversary of Costa Rica, and in order to stimulate national study and art, the organization last autumn conducted a series of public functions and offered prizes for exceptionally skilled work, in whatever line of endeavor it chanced to lie. Among the numerous topics and upon which great interest was manifested may be noted the following: Infantile diseases and the adoption of better means of preserving child life; practical means that should be adopted for improving the public health, with special reference to tuberculosis and kindred diseases; critical analysis of the



SEÑOR DON JUSTO A. FACIO
 Founder and president of the Athenaeum of Costa Rica



PLEASURES OF TROPICAL LIFE - GUADELUPE, COSTA RICA.
First premium awarded Don Anastasio Alfaro by the Costa Rican Athenaeum

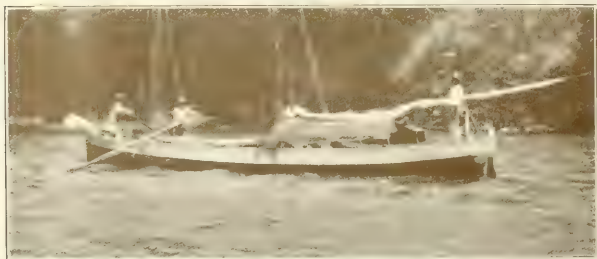


LOCOMOTIVE OF THE DELAWARE & ANNE ARUNDEL RAILROAD
PULLING AN ANNE ARUNDEL COUNTY CAR, FROM ANNAPOLIS

Costa Rican laws with reference to banking; study and examination of the prevailing constitutional laws and laws relating to popular suffrage; the electrification of the railroad to the Pacific; discussion of the best forms of roads that are greatly needed in the Republic; the utilization of the water courses for commercial purposes; the ideal education for Costa Ricans; organization of a national school of arts and sciences; musical and poetical composition, etc.

Such, in brief, are a few of the subjects which the Atheneum of Costa Rica is popularizing and stimulating, and from which it may be seen that the principles of the organization are very broad and liberal, and include discussions of the leading topics which tend to improve and elevate life and conditions.

The work of the institution is divided into various sections, such as section of practical and experimental sciences; moral and political sciences; section of literature; section of letters, etc. Under each



“EL BONGOLO.” PRIMITIVE NAVIGATION ON THE GULF OF NICOYA, COSTA RICA

First premium awarded to Don Aniceto Alfaro, Costa Rican Atheneum.

section are found the names of many persons who are interested more particularly with the work of that section, and included among the numerous names are found those of many of the country's eminent thinkers and scholars.

The name of Sr. Don Joaquin Bernardo Calvo, the Costa Rican minister at Washington, appears in the list of members as a corresponding member of the organization, and who contributes important and interesting papers on timely topics.

Through the courtesy of Sr. Calvo the BULLETIN has the pleasure of presenting to its readers numerous pictures which were awarded prizes at the meeting held some weeks ago in San Jose. Many of them are splendidly executed and indicate the high degree of artistic taste and skill prevailing among the younger members of the atheneum; the pictures also present beautiful glimpses of Costa Rican life and customs.


$$|f(t)| \leq |f| \leq |N| + \cos \lambda \leq |N| + \lambda.$$

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CONTRASTS

Second premium awarded to Don Manuel Gomez by the Costa Rican Athenaeum



LEAVING MASS - CATHEDRAL IN SAN JOSE, COSTA RICA

Second premium awarded to Don Jorge Arce by the Costa Rican Athenaeum



1. The first group of authors (e.g., [1, 2]) considers the problem of the stability of the motion of a system of particles in the field of a central body. The results of these studies are used in the theory of the motion of celestial bodies in the field of a central body.

ECHOES OF THE CENTEN- NIAL AT CADIZ

HARDENED indeed must be the individual who fails to hearken to the call of mother and home—two words that have come down through the ages without losing their sweetness and which appeal alike to all grades of society. The thought of going home to mother awakens the delight of the child as well as the innermost senses of the man of years; we gladly take up our journey to the haunts of childhood and each visit renews and revives many of our nobler impulses.

Public homecomings have long been popular, and in many countries they are annual events of happiness and general rejoicing. When the ancient city of Cadiz called upon her sons and daughters of the New World to come back and renew old ties, to partake of motherly hospitality, and to participate in her festivities there was a generous response. The young nations of the West were glad to have the opportunity of honoring the mother country. A century had passed since the famous proclamation of the Cortes of Cadiz, in October, 1812. Accordingly, in October of the year just closed, Cadiz was in gala array. She had within her precincts many delegations from foreign shores, all closely bound together by ties of tongue and blood.

The city of Cadiz itself dates far back into the misty ages. Tradition traces its origin to Phœnician merchants from Tyre as early as 1100 B. C. Even in the seventh century the place had become a trading port for amber and tin. Later its citizens welcomed the Romans and aided them in sending an expedition against Carthage. Age is written throughout Cadiz, and in the truest sense of the term Cadiz well deserves the title of mother city.

In picturesqueness it also makes its special appeal, for it is built upon a neck of land projecting five miles into the sea, and when seen from a distance the extreme whiteness of its fine old buildings form a striking contrast to the blue waters of the sea which almost surround the city. "Cadiz the Joyous" is still another title which has long attached to the place and its pleasure-loving people.

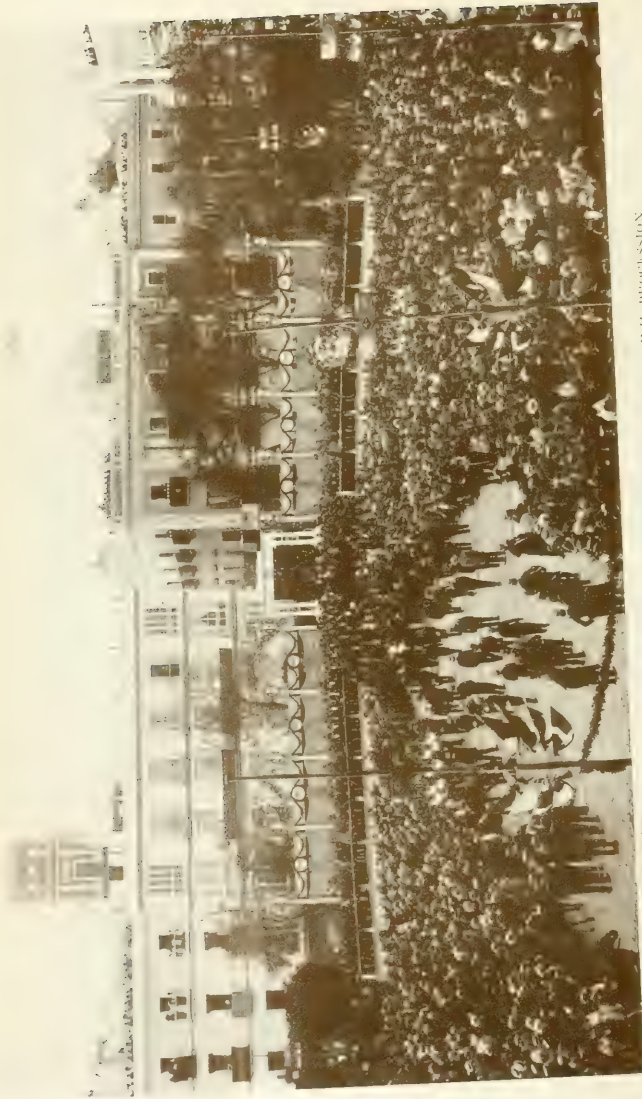
Such, then, is a passing glimpse of the fair old city of Spain that invited her children nations of the New World to return to the mother land for a brief sojourn, and to assist in celebrating the anniversary of the founding the Cortes of Cadiz, a body that has performed noble service during its hundred years of existence.

The offsprings did go home, and with the many delegations went the flags of new and independent nations, and these visiting banners were entwined around and about the royal colors of the Kingdom of Spain. Seemingly the past was forgotten and forgiven, and for nearly a week



THE MEMORIAL OF THE NEW YORK CITY

new piece of the Government of



PLAZA DE LA CONSTITUCION AT THE TIME OF THE ARRIVAL OF THE CIVIL PROFESSION

Courtesy of St. Bonaventure University, Erie, Pa.

The Constitution of 1812 were read to the assembled multitude, followed by the singing of patriotic hymns by a choir of the voters.



Courtesy of Sr. Don Fernando de Cádiz

THE CIVIL EXERCISES

Arrival of the head of the procession at the Plaza de la Constitución. In this distinguished column marched many prominent officials of the Spanish Government and the various delegations from foreign countries.



Courtesy of La Instrucción Artística, Barcelona

DESIGN OF THE MEDAL PRESENTED TO THE CORTES OF
CADIZ BY THE SPANISH CLUB OF BUENOS AIRES



MEMORIAL SERVICE ON THE PROVINCIAL BUILDING

THE LADDER WAS USED BY THE MEN WHO WERE ON THE ROOF OF THE BUILDING AT THE TIME OF THE FIRE. THE LADDER WAS USED BY THE MEN WHO WERE ON THE ROOF OF THE BUILDING AT THE TIME OF THE FIRE.

the city was the scene of feast and frolic; of gayeties, banquets, and speeches that will live long in the annals of the country.

Only one event cast the shadow of gloom over the festivities, and that was the season of mourning with the royal family, occasioned by the death of a relative of the king.

The official ceremonies of opening the centennial began on October 3 with a brilliant reception in the halls of the Provincial Deputies' Building, and were presided over by Capt. Gen. Marques Estella, representative at the centennial of His Majesty King Alfonso. Participating in these ceremonies were the local authorities, the foreign delegates, and other dignitaries. Later a grand banquet took place in the Ayuntamiento in honor of the delegates from Latin-American countries, which occasion was made memorable by the brilliant addresses of the various leaders of thought and affairs in the new republics of the West and by orators of the homeland.

The next important feature of the festivities was the grand civic parade, which, headed by various members of the Spanish cabinet and distinguished guests, passed through the streets of the city to the Plaza de la Constitucion, where various sections of the Constitution of 1812 were read to the assembled multitude, followed by the singing of patriotic hymns by a choir of 100 voices. At night at the Gran Teatro other ceremonies took place and numerous orators made fitting addresses. Among the speakers were Srs. Lobra, Alcorta, Prieto, and various others.

The second day of the festivities was marked by parades of the military, military banquet, and the "Juegos Florales," the latter ceremonies being the observance of the ancient custom of bestowing prizes upon poets and writers whose works merited such distinction. As the queen of this feature, Miss Clara Figueroa, daughter of the former President of Argentina, presided and bestowed the honors. She was assisted by numerous young ladies, and the ceremonies were most beautiful and interesting.

Another feature of the centennial was the presentation of tablets to the Cortes by societies or individuals in foreign countries. For instance, Manila presented a tablet to the memory of Filipino deputies to the mother country; likewise the Spaniards of Cuba, of Mexico, of Chile, and numerous other countries sent tributes of loyalty and respect for former members of the Cortes. These tablets, bearing appropriate inscriptions, were erected on the walls or other suitable places about the Provincial Building.

The daily and weekly papers have given to the public many other interesting details concerning this memorable anniversary, which has gone down as an international gathering worthy to be classed among foremost events. The foreign delegations have returned to their respective countries, but the memory of the varied pleasures and honors and the far-reaching results of friendly intercourse and acquaintance will live long and in many ways aid in the progress of nations.

THE ECONOMIC RESOURCES OF CHILE

CHILE is an old country, and though it is larger than any European country except Russia, its population—3,250,000 in 1907—is only half as large as that of Belgium. But substantial increases are looked for within a short time. The country, with its resourceful territory and latent riches, promises to attract the attention of the world within the next decade by its growth. No longer can it be charged that Chile must suffer from being "on the wrong side of the world," for the Panama Canal will link it more closely to the rest of the world. To-day it is enjoying a splendid forward movement, and is directing no small part of its efforts toward preparing to reap a considerable share of the advantages which must accrue from the opening of the canal and from being brought within easier access of its sister countries.

Chile is one of the longest countries in the world, extending from latitude 18° S. to latitude 56° S. It is also one of the narrowest countries, for no part is 300 miles from the sea, and few important parts are much more than 100 miles from the sea. In a way, therefore, Chile is naturally adapted for commercial activities. Much of its width is occupied by the steep Andine slopes and the less steep Coast Mountains. Between the two ranges there is, in general, less rugged land; plateau-like from latitude 18° S. to latitude 31° S.; mountainous between latitudes 31° and 33° S.; and with a valley—the central valley—fairly continuous from latitude 33° to latitude 41° S. South of the latter point is the relatively less important "archipelago section" of the country. Thus the main part of Chile is divided topographically into three narrow, longitudinal strips. Geologically also these strips are unlike, with resulting differences in mineral resources.

The length of Chile suggests marked contrasts of temperature, for its latitude range is nearly the same as that from Acapulco (Mexico) to Sitka (Alaska). Santiago and Valparaiso correspond in latitude to southern California. Other things than length help sharpen climatic contrasts. North of about latitude 28° S. (Copiapo) rain rarely falls, largely because the prevailing winds are not such as to give moisture to the land. South of the twenty-eighth parallel rain falls more or less regularly every year, increasing in amount from 3 or 4 inches annually, in southern Atacama, to as much as 12



SECTIONAL MAP OF CHILE



Top picture: Section of United Harbor and city. Picture of Antofagasta, with the barren mountains. Part of the nitrate fields which constitute the greatest natural wealth of Chile is located in this Province. Center picture: The Plaza in Antofagasta. The clock tower is a gift from the British colony. Lower picture: In the salinas of the Antofagasta "pampa." The nitrate regions of Chile are distinctly barren and rain rarely falls there.

or 15 inches in Aconcagua (latitude 33° S.). As far south as Valparaiso the rain falls mainly in the four months from May to August, during which time moist westerly winds strike that part of the land. South of here these winds are more persistent, the rainfall is heavier, and although most of it comes between April and September (the cooler months), the quantity falling at other times is also greater. South of about the thirty-seventh parallel (Concepcion) there are no regularly rainless months; beyond latitude 39° S. (Valdivia) the rainfall in summer is enough for crops; and some places in the "archipelago region" are said to have even a surplus of rain. For the most part the central valley and the landward slopes of the Coast Mountains get less rain than the seaward slopes of that range. The height of the Andes, however, causes heavy snowfall on their upper slopes and summits, especially from about latitude 32° to latitude 42° S. In this section the limit of permanent snow descends gradually from about 13,000 feet to about 5,000 feet. Streams fed by the spring and summer melting of this snow are of vital importance to irrigation.

These contrasts of topography, temperature, and rainfall in the different parts of Chile give a variety of agricultural, forest, and water resources.

Chile commonly is described as "mainly agricultural." This is true to the extent that the number engaged in agricultural occupations is greater than that in any other single line of pursuits. But it probably no longer is true that most of the people depend directly on farming, since more than half the population (Census of 1907) is credited to urban communities and to the rural districts in the northern, non-agricultural Provinces.

The agricultural resources of Chile are varied, for climatic conditions permit the growth of nearly all subtropical and Temperate Zone crops. A list of the crops grown shows the range of possibilities in the country. Wheat is the chief crop, covering about 55 per cent of the planted area. Barley, beans, maize (corn), vineyards, potatoes, and vegetables cover about 35 per cent of the planted area. Oats, forage plants, orchard and tree crops, and industrial plants make up the remainder. Among the orchard and tree crops excellent apples, pears and peaches, citrus fruits, olives, plums, cherries, quinces, and various nuts (especially walnuts) are found. Of industrial crops, tobacco, flax, hemp, and sugar beets are grown, but only tobacco attains any prominence. The cereals, hardy fruits and vegetables are staples in the cooler regions south of the Bio-Bio River. Vineyards and the less hardy fruits and vegetables are relatively the more important in the milder, irrigated region from Concepcion to Coquimbo. Better fruit than that raised in Chile is not to be found anywhere.

The northern four Provinces, Tacna, Tarapaca, Antofagasta, and Atacama, the "nitrate and mining zone," are mainly non-crop lands,



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because they lack streams to supply water for irrigation. The Provinces from Coquimbo southward, comprising about 70 per cent of the country, or about 210,000 square miles, are commonly described as the "agricultural zone." But the "archipelago region," as a whole, has less value for crops than for grazing and forest lands, owing to its ruggedness and persistent cool, rainy weather. Even between Coquimbo and northern Llanquihue, unirrigable areas, uncultivable mountain slopes and lands which should remain permanently forested occupy a large part of the "agricultural zone." As a result of these deductions the total area "suitable for farming" is reduced to about 70,000 square miles.¹ That the estimate is generous enough is shown by the fact that the total land area from the Province of Coquimbo to the Gulf of Reloncavi (Llanquihue) is only about 80,000 square miles. Outside this region the farm lands are quite limited. Only one-third of the available "farming land," or an area a little smaller than West Virginia, is as yet "used profitably for agriculture." Approximately 5,000,000 acres (about 8,000 square miles) are said to be actually under crops, while equal areas are reported as land lying fallow and pastures, respectively. More than half the crop lands are said to be irrigated. Thus Chile has in actual cultivation less than 3 per cent of its total area, while the whole extent of available farm lands is said to equal nearly 25 per cent of the country. Much of this latter figure, however, represents lands best suited for forage crops and pasturage.

In the drier Provinces, the arable land yet untilled must be irrigated before it will yield good crops, but in many cases the water can be secured readily. In the southerly Provinces excellent lands, not requiring irrigation, still are untouched by the plow. Land good for food crops is also found raising forage or being used for pasture. Few crops are made to yield maximum returns though the soils, in most cases, are rich enough to give large yields per acre. Both extensively and intensively, therefore, Chilean agriculture can be developed enough to double or treble present production. The central valley, especially with an area more than twice the size of Belgium probably can be made as productive as any other equal area in the world. Exaggeration is not necessary in order to establish the fact that Chile has latent agricultural resources sufficient to provide for much growth of population. With these resources fully developed, Chilean crops ought easily to support at least twice as many people as the country has now.

Grazing, of both cattle and sheep, and dairying are already of considerable importance, especially in the more moist southerly Provinces, where good forage is available the year around. In some

¹ Estimates of areas adapted from Censo de Chile, 1907; Galdames, *Geografía Económica de Chile*, Santiago, 1911; *Estadística Agrícola de Chile*, 1910; Santiago, 1912.

places the live stock probably will be displaced by cultivated crops. But hides and skins and wool always must be reckoned among Chilean raw materials for manufacture, for there are many hundreds of square miles in the "agricultural zone" fit only for pasturage.

The forests of commercial value are limited to the rainy sections, mainly south of the thirty-eighth parallel. Large areas originally forested have been cleared for crops, especially in the valleys, and lumbering activities have deforested additional areas. As a result the actual forest area has been reduced to about 75,000 square miles, or about one-fourth of the country.¹ Several valuable species of trees, including both conifers and hardwoods, are found in Chile. Among the most useful are the roble, much used for heavy construction; rauli, excellent for furniture and interior finishing; lingue, strong and durable; alamo (poplar) and laurel, soft and comparatively cheap; alerce, excellent timber, but not as abundant as formerly; and cipres.

The development of lumbering was retarded for a time by lack of adequate transportation facilities. But the longitudinal railroad was extended into the forest zone as far as Temuco, in 1893, and to Osorno, in 1895, so that along the railroad the lumber industry has now reached large proportions. Great stocks of lumber are seen at many of the stations south of Lautaro, waiting for cars to take it to the markets. Many sawmills are scattered through the more accessible forest areas. Thus in 1910 from Bio-Bio to Llanquihue, there were reported 142 sawmills, representing invested capital of nearly \$2,500,000, employing about 2,600 persons, and with an output valued at more than \$2,000,000.² If all the woodworking industries in those Provinces were included, these totals would be doubled or trebled.

As the Chilean forests are probably the best commercial forests on the Pacific coast south of California, the Government is becoming more and more appreciative of the importance of scientific administration and conservation of forest lands, and there is an awakening sentiment in the country concerning the need for checking unwise deforestation.

Some important planting of pine also has been done, especially in the vicinity of Talcahuano, partly as the outcome of governmental encouragement. The country still has excellent forests. Such forests well used in the future will be one of the best assets of Chile. Water power for mills is close at hand. Railroad lines are being extended and seaports, for the most part, are within a radius of 100 miles. Manufactures depending on the forest resource, therefore, ought to be permanent, important activities of southern Chile. The necessary markets for their products exist already.

¹ *Geographical Magazine*, 1910, p. 100.

² *Statistical Bulletin*, No. 10, p. 10. *Laurelito* (Llanquihue), Sept., 1910.



Top picture: "Caliche" ready for the carts to carry it to the nitrate plant. Center picture: "Rios Secos", Dry Rivers, in the salina. A nitrate plant in the distance. Lower picture: Workmen in a nitrate plant.



There are said to be more than 900 miles of navigable rivers in Chile, but owing to the ruggedness of much of the country most of the streams are navigable only for short distances, and not many of them are deep enough for boats exceeding a few tons burden. Yet the lack of long navigable streams, or a system of natural water routes, is no drawback to Chile, owing to the nearness of all parts to the seacoast.

Chilean water resources, however, are important in other ways. Half the lands now cultivated are watered artificially, and much of the lands waiting to be planted must be irrigated before they will yield profitable crops.

From Coquimbo to the Bio-Bio River the extent of cultivated areas and the yields of crops depend largely on the supplies of water for irrigation, because most of the light rainfall comes in less than half (the cooler part) of the year. The topography, however, makes irrigation easy, for the water of snow-fed streams—increasing in number southward—can be diverted readily near the base of the mountains and thence be distributed widely over the lower-lying central valley and the valleys in the Coast Range. A beginning has been made, as in the Maipo and Cachapoal Rivers, to store water and to construct more elaborate engineering works for its distribution. Large irrigation projects, in most cases involving storage dams in the Andine valleys, would make available for crops extensive areas not now planted, for there is in sum total much more water than is needed for present irrigated lands. Such undertakings could greatly increase production, especially in the region from Santiago to Bio-Bio.

Water power is now developed on a small scale at numerous places, a little less than 14,000 horsepower being reported as used for manufactures in 1910.¹ But the total water power used for all purposes is probably considerably more than that figure. For the future, water power is a latent resource of much significance in the Provinces from Aconcagua southward. There many snow-fed streams descend thousands of feet, in a very short distance, from the mountains to the level of the central valley (nowhere over 1,800 feet above sea level). With such great descents, a relatively small volume of water can be made to yield much power by methods now common in many mountain regions. In addition to the rapid mountain streams, some important falls occur, as the falls in the River Laja, one of which has a height of more than 100 feet. Nearly all the power sites are within the radius of economical transmission of electricity to established centers of population and industry. Thus the cascades of the Laja have within a radius of 120 miles: Concepcion (population 55,000); Chillan (34,000); Temuco (16,000); Taleahuano (15,000, and the second port of southern Chile); as well

¹ Statistics from Sociedad de Fomento Fabril, Santiago.



Top picture: Landscape, looking across the Province of Antofagasta, Chile, from the water. The second picture of landscape, from the Province of Antofagasta, Chile, the Mar. River, showing the landscape, looking from the water. The third picture, looking from the water. About 80,000,000 gallons are annually produced in Chile. Lower picture: View of Valparaíso from the typical uncultivable slope of the coast mountains.

as nearly a dozen cities ranging from 5,000 to 15,000 each. Manufacturing industries already established in these centers would be greatly stimulated by the introduction of cheap hydro-electric power.

For most efficient power development storage of water probably will be necessary in some cases, owing to the fluctuating discharge of the streams. But in the Maipo, Rapel, Mataquito, and Maule Rivers, reservoirs in the headwaters would benefit irrigation also.



TYPICAL IRRIGATION DITCH IN THE MAIPO VALLEY. NOTE UPPER LAYER OF FINE CLAYEY LOAM, SIX IN. THICK AND UNDERLYING COARSE GRAVELS.

The narrow valleys in the Andine Range and convenient supplies of cement-making materials would make easy the construction of storage dams. From the Bio-Bio River southward, lakes are common in the headwaters of most streams, and provide much natural storage surface, which in most cases could be increased artificially with little difficulty.

There are no available estimates of the amount of water power in Chile, but that the total is enormous must be the conclusion of any careful observer traveling through the Provinces from O'Higgins to Llanquihue. If the use of this power can be combined with the increased production of raw materials of which the country is capable, Chile will develop

greatly in manufacturing industries. The lines for this development already have been laid down in the varied manufactures now carried on, mainly in small establishments, in the seaports and in the cities of the central valley. Thus in 1910, more than 220 classes of manufactures were carried on in 5,270 establishments, employing more than 71,000 persons, with \$150,000,000 of capital invested, and having an annual output valued at nearly \$200,000,000.¹ This is a per capita value of manufactures nearly

¹ Statistics from Socio-Led de Fomento 1 (Bul. Santiago).





Top picture: Flourishing planted pines on steep slopes overlooking Taleadanano Bay. Land at right shows holes ready for additional planting. Center picture: Plowing with primitive wooden plows on the level summits of coastal hills, south of Concepcion. Lower picture: Progress of deforestation and wasting of trees. Note fences of saw logs. View taken south of Lanco, in the Valley of the Cruces River.

one-third as great as that in the United States in 1910. It is a remarkable percentage when it is remembered that Chilean manufactures are still in their infancy, while the United States is one of the greatest manufacturing countries in the world. If properly developed, Chilean power resources, extensively and favorably located, might well make central and southern Chile among the leading manufacturing regions of South America.

Minerals of various sorts are found in nearly all parts of Chile. But in the more southerly Provinces little mining has been done, largely, perhaps, because the heavy forest makes prospecting difficult. Minerals have been the leading factor in attracting capital and immigrants to Chile, and they have been the backbone of the export trade for many years. Minerals have built the ports north of Valparaiso, and have induced half a million people to live in one of the most barren regions in the world. Minerals have been the foundation of many of the Chilean fortunes.

According to average annual value of production in recent years the most important minerals are nitrates, copper, coal, iodine, borax, gold, and silver. Iron, manganese, sulphur, cobalt, lead, zinc, tin, mercury, guano, and structural materials are other minerals already exploited or known to occur. In recent years the value of mineral products has exceeded \$100,000,000, which gives Chile a per capita value of mineral products greater than that of the United States in 1910 (its greatest year).

The known nitrate deposits extend, in scattered patches, from about latitude 19° S. to latitude 26° S. Pisagua to Chañaral. Guano is found along the coast from Camarones to Mejillones, but its chief production has been from Pisagua to Punta Lobos. Iodine, borax, and salt come from the "nitrate zone." Whatever their origin may be, these deposits of nitrate, guano, and borax owe their preservation to the lack of rain. More rainfall, according to the people of northern Chile, is the last thing to be desired. Copper and gold are reported from nearly all parts of Chile, but the former has been exploited chiefly from the Province of O'Higgins-Rancagua northward, and the latter from Aconcagua northward, though some gold still comes from the gravel washings along the rivers farther south. Little profitable silver working has been done outside the district between Santiago and Tarapaca, where the most important deposits are found along the base of the Andine Range and its lateral spurs.

Coal mining is limited to the coast zone from Talcahuano to Lebu, but coal measures, not proved yet to be workable profitably, are reported as existing in nearly all the coastal and in parts of the central region from the province of Atacama to the island of Chiloe. In general the coal mined is a good quality of bituminous. With such abundant water-power resources, however, coal is not essential



IRRIGATION WORKS OF THE RIVER MAIPO. AUTOMATIC LOCKS THAT CONTROL THE FLOW OF THE WATER FROM THE RESERVOIR.



MECHANISM FOR OPENING AND CLOSING DOORS LEADING TO THE SUPPLEMENTARY DISTRIBUTING CANALS.

to Chilean industrial progress. Iron and manganese ores are reported from many sections, but the Provinces of Coquimbo and Atacama seem to have the largest supplies. Good ore from Coquimbo is already being exported to Europe in addition to stimulating domestic manufacture of iron and steel products. In the central region calcareous rocks supply abundant material for lime and cement; clay is widespread; good kaolin is fairly abundant; and excellent building stones are found in the mountains. Aside from coal and structural materials, the mining regions and the chief known mineral resources are almost entirely in the Provinces from O'Higgins northward. Similar resources are believed by many to exist to the south also, but that is yet to be proved.

The magnitude of the nitrate industry, absorbing both capital and labor, has in a measure caused a delay in the development of other mining industries. Known nitrate lands are now largely preempted, and attention is being turned in other directions. Inadequate transportation facilities and the problem of reduction of ores, owing to difficulties of getting it and the cost of fuel have also contributed to this delay in developing mining industries. However, the recent extension of the longitudinal railway north of Santiago is helping solve the transportation problems and marked progress in mining is to be looked for.

The region from Coquimbo northward must depend almost entirely on mineral resources for future development. Only a few irrigable valleys in Coquimbo and Atacama offer much chance for crops in this section. The region from Aconcagua to Concepcion has possibilities of development in mining, and especially in irrigated agriculture and in manufactures depending on water power. The region from Bio-Bio to northern Llanquihue may develop much on the basis of agriculture, manufacturing enterprises, and forest resources (mainly south of latitude 39°). In the "archipelago region" forests and grazing lands, the latter said to represent great possibilities for sheep especially, are the main assets now known. Thus in nearly all parts the undeveloped natural resources are sufficient to permit much growth in population, industry, and commerce. How soon this growth is to be realized depends on the coming of outside capital, on healthy immigration, and on the internal policy of the country itself.



LATIN AMERICAN FOREIGN TRADE IN 1911 A GENERAL SURVEY.

Countries	Imports			Exports			Total foreign trade		
	1910	1911	Increase	1910	1911	Increase	1910	1911	Increase
Mexico...	807,143,801	806,006,881	-81,429,008	817,012,155	817,451,008	817,428,853	827,155,956	824,458,811	\$16,002,825
Guatemala ..	5,751,517	5,751,521	1,261,101	10,070,210	13,081,724	10,082,565	15,830,530	17,496,145	2,165,609
Salvador ..	5,113,440	5,290,751	1,676,151	7,297,846	8,409,390	1,108,175	11,004,087	13,796,070	2,755,594
Honduras ..	2,010,410	2,290,920	279,510	3,021,946	3,571,946	550,000	5,591,332	6,285,065	994,333
Nicaragua ..	2,083,227	2,207,203	123,976	3,080,128	3,514,075	555,047	6,374,088	7,401,880	828,093
Costa Rica ..	1,984,637	2,067,501	82,864	8,404,111	9,020,150	555,739	10,417,088	17,087,711	1,540,043
Panama ..	10,020,904	10,020,070	-834	1,700,000,000	1,754,050	55,280	11,826,424	11,774,130	1,52,204
Cuba ..	106,165,381	114,166,115	7,750,734	170,900,000	122,882,954	-48,017,046	254,581,001	250,419,087	118,205,514
Dominican Republic ..	6,257,601	6,400,662	143,061	10,849,623	11,004,996	155,373	17,107,414	17,454,508	847,265
Haiti ..	7,082,000	7,948,117	866,117	11,008,183	13,453,431	2,406,548	18,090,183	23,433,448	4,732,965
North American Republics...	247,087,073	261,647,463	14,960,410	336,962,401	334,550,191	-2,412,210	584,049,451	596,197,654	11,548,200
Argentina Republic ..	341,077,536	355,896,465	11,588,829	261,417,274	314,950,012	46,490,662	702,604,810	670,762,977	-31,841,833
Bolivia ..	18,124,000	20,704,800	2,580,800	29,080,677	32,429,157	3,145,200	47,205,957	54,001,006	7,775,049
Brazil ..	259,374,257	277,762,757	22,187,720	610,006,438	525,271,014	-84,735,424	545,581,255	583,034,171	37,452,890
Chile ..	108,382,277	124,381,479	15,999,202	120,021,019	123,884,917	3,863,898	238,004,198	271,265,896	22,061,698
Colombia ..	17,025,637	18,107,620	1,081,983	17,625,153	17,375,899	-249,254	34,650,790	40,484,762	5,833,972
Ecuador ..	15,020,262	15,107,620	87,358	13,628,408	14,358,033	729,625	27,378,700	21,565,642	-5,813,058
Paraguay ..	15,637,306	16,254,481	617,175	4,902,814	4,780,063	-122,751	22,428,180	11,041,546	-11,386,634
Peru ..	22,306,021	30,494,006	8,187,985	31,144,275	46,071,050	14,926,806	53,652,271	67,036,002	13,383,731
Uruguay ..	42,506,756	47,574,115	5,067,359	13,434,145	16,438,036	3,003,891	80,129,831	94,005,151	13,875,320
Venezuela ..	12,587,552	18,304,800	6,007,348	17,948,571	22,084,384	4,135,813	30,336,123	41,070,274	10,734,151
South American Republics...	840,973,196	863,131,174	22,157,978	919,238,809	942,143,273	22,904,464	1,760,212,065	1,805,296,447	45,084,382
Total Latin America	1,078,000,249	1,174,778,637	96,118,888	1,286,201,210	1,276,683,464	-9,517,746	2,344,801,450	2,431,494,101	86,692,652

Fiscal year ending Sept. 30, 1911

1910.

1909.

Increase

LATIN AMERICAN FOREIGN TRADE IN 1911—GENERAL SURVEY

THE foreign commerce of the 20 Latin American Republics for the year 1911, custom-house values, was \$2,431,461,101, imports \$1,151,778,637, and exports \$1,276,685,464. For the preceding year the figures (revised and corrected) are: Imports, \$1,058,660,249; exports, \$1,286,201,210; total, \$2,344,861,459. The increase in imports for the year was \$96,118,388, and the decrease in exports \$9,515,746, a net increase of \$86,602,642 in total trade.

The population of these 20 Republics from the best obtainable sources of information—estimates in many cases and in these more probably over than understatements—amounts to about 73,666,000. On this basis the foreign commerce for 1911 was \$33 per capita—imports \$15.67 and exports \$17.33.

The foreign commerce of the United States for the same year was: Imports, \$1,553,067,130; exports, \$2,093,526,846; total, \$3,646,593,976, which shows a per capita of imports \$16.63, exports \$22.70, total \$39.33. In other words, Latin Americans per individual bought within \$0.96 and sold within \$5.37 as much to outsiders as the people of the United States bought and sold. Latin American per capita foreign commerce exceeded the like per capita of Austria-Hungary, Russia, Italy, Spain, Portugal, any of the Balkan States, Greece, and Turkey. It was three and one-half times that of Japan, nine times that of British India, and twenty times that of China.

The per capita of Cuban commerce—imports \$53.35, exports \$69.92—exceeded that of the United Kingdom, and the per capita of Argentina \$50.91 and \$15.07, of Uruguay \$12.88 and \$41.65, and of Chile \$36.40 and \$45.40, exceeded the per capita of the United States, France, and Germany.

In 1911, owing to the fall in price of a number of the more considerable Latin American exports, there was a slight decrease in exports measured by values, but on the whole an increase measured by quantities. The annual increase in total trade by values in 1911 was less than 4 per cent, imports 9 per cent, exports -0.7 per cent. The increase of 1910 over 1909 was about 10 per cent, and this figure may be conservatively reckoned as about the normal percentage of increase in recent years, although if a period longer than 10 years be taken the

annual percentage of increase will be found to average more than 10 per cent.

	Imports.	Exports.	Total.
1911.....	\$1,154,778,637	\$1,276,685,464	\$2,431,464,101
1897.....	415,079,562	495,342,937	910,422,499
Increase..	739,699,075	781,342,527	1,521,041,602
Per cent of increase, 14 years...	178	158	167
Average yearly per cent of increase.....	12.7	11.3	11.9

Of extraordinary increase in trade during this period of 14 years, Cuba furnishes a remarkable instance, as shown in the following table. To avoid fluctuations occurring in the case of exports, averages for the three years at the beginning and the three years at the end of the period are given.

	Imports	Exports
Average 1909, 1910, and 1911..	\$102,852,099	\$132,835,347
Average 1896, 1897, and 1898..	\$11,253,061	\$17,931,502
Increase..	\$91,599,036	\$114,903,845
Per cent of increase...	814	641
Yearly per cent of increase..	49.3	62.6

This remarkable showing, however, was due to something more than the annual increase in trade under normal conditions. It represented Cuba's emergence from the hampering condition of European sovereignty into the free state of republican government.

The following table shows annual increase under normal conditions:

Argentina

	Imports.	Exports.
Average 1909, 1910, and 1911.....	\$330,232,438	\$353,944,633
Average 1896, 1897, and 1898.....	\$105,960,667	\$117,266,667
Increase..	\$224,271,771	\$236,677,966
Per cent of increase	211	202
Yearly per cent of increase	16.2	15.5



A MODERN RAILWAY CAR IN ARGENTINA.

TRADE BALANCES.

The following table gives the trade balances of the Latin American countries for the years 1910 and 1911. Plus + means excess of exports over imports and minus - excess of imports over exports.

Country.	Trade balance.	
	1910.	1911.
Mexico	- \$32,590,244	- \$51,445,085
Costa Rica	+ 14,827,902	+ 166,000
Guatemala	+ 3,552,587	- 1,000,000
Honduras	- 447,500	- 536,213
Nicaragua	+ 1,406,171	+ 688,300
Costa Rica	+ 481,754	+ 2,800
Paraguay	+ 8,287,664	- 8,266,020
Uruguay	+ 47,233,439	+ 1,128,700
Dominican Republic	+ 4,591,932	+ 1,128,714
Haiti	+ 3,326,483	+ 1,128,714
North American Republics	+ 89,275,348	+ 12,862,728
Argentina	- 20,229,738	- 46,846,700
Bolivia	+ 10,945,957	+ 1,461,008
Brazil	- 74,431,601	- 67,769,107
Chile	+ 11,439,640	+ 47,060,000
Colombia	- 69,000	+ 2,000,000
Ecuador	+ 1,480,000	+ 1,000,000
El Salvador	+ 1,337,448	+ 1,110,000
Peru	- 8,636,429	- 1,110,000
Venezuela	+ 5,361,019	+ 4,280,400
South American Republics	+ 138,265,613	+ 10,044,000
Total Latin America	+ 227,540,961	+ 121,906,827

In the consideration of international commercial statistics it is necessary to disburse one's mind of the idea sometime entertained that a surplus of exports over imports, i. e., a favorable trade balance, means that the country having such a surplus is to that extent accumulating capital; or, conversely, with an unfavorable balance is growing poorer. Many newspaper and magazine writers on commercial and financial subjects fall into this error, believing themselves able to compute, almost to the exact dollar, pound, franc, or mark, the increase in capital or wealth in any country. Nothing could be more fallacious.

While there is in truth a fundamental relation between the sum total of exports and of imports and between this balance, favorable or unfavorable as it may be, and national capital increases or decreases, yet the two trades follow separate, distinct, and by no means parallel channels, and in sums total increase or decrease in one trade, owing to conditions which may sometimes be reflected in both trades but most often are not, has no close relationship to increase or decrease in the other trade. In other words, it is necessary to consider separately the kinds and character of exports and of imports in order

to arrive at an understanding as to whether the whole trade from a national standpoint is gainful or otherwise, always bearing in mind that what is beneficial to the individual may or may not be beneficial to the country, and, on the other hand, that individual loss may be national gain.

It is likewise essential to take into consideration questions of foreign capital investments as reflected in imports, and the interest and dividend payments on this capital as reflected in exports. Does the sum total of imports represent wholly running expenses, or does it in part represent foreign capital investments? Does the total of exports stand for the proceeds of profitable industry alone, or does it in part stand for withdrawals of capital or, perhaps, reckless exploitation and wasting of national resources?

The most notable fact apparent on the face of Latin American commercial statistics is the large increase in imports, in the last two years for which compiled statistics are possible, namely, 1910 and 1911.

The increase in imports in 1910 over the preceding year was over \$171,436,000, and in 1911 over 1910 over \$96,118,000; in all an increase of nearly \$267,555,000, or 30 per cent in two years. Nearly \$150,000,000 of the increase in the first-mentioned year was in the imports of Mexico, Cuba, Argentina, Brazil, and Chile, and nearly \$85,000,000 of the increase in the second year was in the imports of Cuba, Argentina, Brazil, Chile, Peru, Venezuela, and Uruguay.

What does this increase in imports in two years of 30 per cent for the whole 20 countries and much more than 30 per cent for a number of them represent? On the face of the figures it might be taken to mean only an increase in running expenses due to an increase in population and a raising of the standard of living, or even to the increase in cost of living at a like standard. All of these things have had their influence on augmenting the volume of imports, but by no means do they account for the whole increase or even for the greater part of it.

The bulk of the increase in imports of \$267,500,000 was additional capital investment. The collection of statistical data has not reached (and never will) that degree of comprehensiveness from which we can determine the ultimate use and purpose of all imports. This being true, it can readily be seen that any attempt to determine the percentage of capital investment must fail. However, from known facts it can be stated, with a reasonable degree of certainty, that the proportion of capital investment is certainly more than one-half and probably two-thirds of the whole increase. This capital investment does not represent entire foreign capital invested during the period in Latin America; it represents only the capital indirectly invested. In the main this capital investment appears in the customs-

EXPORTS AND IMPORTS TO AND FROM UNITED KINGDOM, GERMANY, FRANCE AND UNITED STATES, IN PROPORTION TO THE TOTAL FOR EACH REPUBLIC.

COUNTRIES.	1911	NORTH AMERICAN REPUBLICS EXPORTS	1911	100%
CUBA	1,144,000	1,144,000	100%	
MEXICO	1,144,000	1,144,000	100%	
GUATEMALA	1,144,000	1,144,000	100%	
EL SALVADOR	1,144,000	1,144,000	100%	
GUATEMALA	1,144,000	1,144,000	100%	
HONDURAS	1,144,000	1,144,000	100%	
NICARAGUA	1,144,000	1,144,000	100%	
PANAMA	1,144,000	1,144,000	100%	
HAITI	1,144,000	1,144,000	100%	
CUBA	1,144,000	1,144,000	100%	
MEXICO	1,144,000	1,144,000	100%	
GUATEMALA	1,144,000	1,144,000	100%	
EL SALVADOR	1,144,000	1,144,000	100%	
GUATEMALA	1,144,000	1,144,000	100%	
HONDURAS	1,144,000	1,144,000	100%	
NICARAGUA	1,144,000	1,144,000	100%	
PANAMA	1,144,000	1,144,000	100%	
HAITI	1,144,000	1,144,000	100%	

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house reports as imports of railway equipment and material, material for dock improvements, mining, agricultural, and other industrial development; that is, it is a part, not the whole, of the imports credited under these and other heads.

It is important to have a clear understanding of the social and industrial conditions of Latin America in order to understand the currents of trade, both in imports and exports. These conditions are unlike those in any other part of the world. From the standpoint of production Latin America is in general almost primitive, while from the standpoint of consumption it is abreast of Europe and the United States. That is to say, the exports of Latin America are those of all new and but slightly developed countries, while the imports, on the other hand, are those of a highly developed and modern civilization. Its exports are the crude products of the mines, of the forests, and of agricultural and pastoral industries. It does not supply its own needs for anything except raw material and primary food products, and by no means all of these. Of manufacturing there is but little.

EXPORTS.

The following statement shows the value in United States currency of the exports of the 20 countries and the character and kind of the principal thereof:

Mexico. Value, \$147,451,969; classified in general as mineral, \$93,350,060; vegetable, \$41,529,541; animal, \$9,212,809; manufactured products, \$2,241,771; and miscellaneous, \$1,054,788.

The principal mineral exports were: Gold (uncoined bullion), \$24,056,714; silver (uncoined bullion), \$39,257,689; other metals, including copper, lead, antimony, and zinc, \$18,002,721.

The principal vegetable exports were: Coffee, \$4,336,416; rubber, \$7,903,769, guayule rubber, \$4,815,140; chicle, \$1,829,160; chick peas, \$2,163,120; henequen, \$11,134,600; ixtle, \$1,644,038; cabinet woods, \$1,953,539; zacatón root, \$994,775; and vanilla, \$1,535,005.

The principal animal exports were: Hides and skins, \$5,063,799; and cattle, \$3,544,899.

The principal manufactured exports were: Sugar, \$745,412; cotton-seed cake and meal, \$387,930; and palm-leaf hats, \$360,545.

Guatemala. - Value, \$10,981,724. The principal exports were: Coffee, \$9,273,909; bananas, \$526,711; sugar, \$344,015; hides, \$325,260; rubber, \$159,621; and woods, \$158,178.

Salvador. Value, \$8,406,309. The principal exports were: Coffee, \$5,834,439; gold in bars, \$760,413; gold and silver amalgams, concentrates, etc., \$700,256; sugar, \$391,796; and indigo, \$261,031.

Honduras. - Value, \$3,024,726. The principal exports were: Gold and silver ore, \$1,051,675; and bananas, \$1,284,171.

Nicaragua. Value, \$1,545,075. The principal exports were: Coffee, \$2,798,893; gold and silver ores, \$894,832; rubber, \$346,182; and hides, \$196,451.

Costa Rica. Value, \$9,020,150. The principal exports were: Bananas, \$4,375,505; coffee, \$2,871,185; gold and silver in bars, \$1,183,165; and woods, \$91,054.

Panama. Value, \$1,754,050. The principal exports were: Bananas, \$1,030,885; ivory nuts, \$118,408; coconuts, \$112,827; rubber, \$111,143; mother-of-pearl, \$62,493; hides, \$86,729; bar gold, \$119,580.

Cuba. Value, \$122,885,952. The principal exports were: Sugar, \$85,168,933; molasses, \$1,197,433; distillates, \$431,543; tobacco, unmanufactured, \$16,888,761; tobacco, manufactured, \$13,098,982; iron, gold, and copper ores, \$3,874,172; woods, \$2,109,890; fruits, \$1,835,952; hides and skins, \$1,707,434; honey and beeswax, \$431,543; grains and vegetables, \$437,732; and sponges, \$299,139.

Dominican Republic. Value, \$11,004,906. The principal exports were: Sugar, \$4,159,733; cacao, \$3,902,111; leaf tobacco, \$1,421,424; coffee, \$319,142; bananas, \$194,759; beeswax, \$165,317; hides, \$104,303.

Haiti. Value, \$15,475,331. The principal exports were: Coffee, 51,795,659 pounds; cocoa, 3,228,350 pounds; cotton, 4,198,227 pounds; cotton seed, 8,058,080 pounds; campeche logs and roots, 75,197,092 pounds; honey, 190,148 gallons; orange peel, 462,725 pounds.

Argentina.—Value, \$314,956,612, classified in general as live animals and meat products, \$163,342,891; agricultural products, \$135,570,454; forest products, \$11,886,966; mine products, \$548,378; hunting and fishing products, \$1,613,386.

The principal live animals were beef cattle, \$7,956,667. The principal meat products were: Frozen beef, \$28,880,578; frozen mutton, \$6,667,086; salt cattle hides, \$19,053,091; flint cattle hides, \$14,353,723; wool, \$18,979,206; sheepskins, \$7,493,126; jerked beef, \$1,611,767; goat skins, \$968,672; bristles, \$1,534,259; chilled beef, \$1,464,316; horse hides, \$606,368; kidskins, \$276,561; canned meat, \$1,495,093; meat extracts, \$1,000,219; beef scrap and meal, \$877,588; butter, \$541,505; tallow and grease, \$11,415,833; margarin oil, \$625,921; casein, \$420,659; bones, \$2,376,463.

The principal agricultural products were: Indian corn, \$2,683,599; wheat, \$78,254,814; linseed, \$32,572,590; oats, \$11,316,302; hay, \$659,042; wheat flour, \$4,597,238; and bran, \$4,473,923.

The principal forest products were: Quebracho wood and extract, of the former \$6,690,681, and of the latter \$4,830,626.

The principal mining product was copper \$399,582, and the principal hunting and fishing products were whale oil \$1,169,973, nutria skins \$150,082, and ostrich and other plumes \$227,601.

Bolivia. Value, \$32,226,156. The principal exports were: Tin, \$20,529,445; silver, \$2,097,909; bismuth, \$865,040; copper, \$556,508; rubber, \$7,379,265; and coco, \$199,310.

Brazil. Value, \$325,271,614. The principal exports were: Coffee, \$196,515,379; rubber, \$73,352,116; hides, \$8,751,090; yerba mate, \$9,650,346; cacao, \$7,992,437; tobacco, \$4,709,345; skins, \$3,152,506; sugar, \$1,986,836; cotton, \$4,764,143; gold, \$2,275,440; manganese, \$1,255,601; Brazil nuts, \$1,291,053; carnauba wax, \$1,897,540; bran, \$1,781,392; cotton seed, \$878,853; and monazite sand, \$539,965.

Chile. \$123,884,417; classified in general as animal products, \$7,668,669; vegetable products, \$5,281,687; mineral products, \$107,-483,258.

Under animal products the principal exports were: Hides, \$760,728; wool, \$2,519,150; chinchilla skins, \$239,211; wax, \$128,954.

Under vegetable products the principal exports were: Bran, \$414,305; frijoles, \$669,262; carob beans, \$232,917; barley, \$657,880; oats, \$580,276; nuts, \$678,234; hay, \$166,742; wheat, \$505,232; wheat flour, \$283,221; quillay bark, \$158,604; oak railroad ties, \$78,675.

Under mineral products the principal exports were: Nitrate of soda, \$95,867,058; borate of lime, \$2,274,492; copper, \$4,506,182; copper ore, \$2,116,657; copper and gold ore, \$169,921; iron ore, \$417,560; and iodine, \$1,876,277.

Colombia. Value, \$22,375,899. The principal exports were: Coffee, \$9,475,419; bananas, \$2,172,000; tobacco, \$332,935; ivory nuts, \$739,419; rubber, \$900,887; gold in bars, gold dust, and platinum, \$4,097,528; cattle hides, \$1,779,790; and Panama hats, \$1,088,-821.

Ecuador. - Value, \$13,558,033. The principal exports were: Cacao, \$7,879,844; ivory nuts, \$1,665,951; Panama hats, \$1,255,990; rubber, \$1,004,029; coffee, \$729,262; gold ore, \$134,516; gold bars, \$114,152; and hides, \$256,725.

Paraguay. - Value, \$4,789,065. The principal exports were: Hides, \$1,134,606; quebracho extract, \$634,186; yerba mate, \$553,629; woods, \$979,740; tobacco, \$534,085; oranges, \$258,517.

Peru. - Value, \$36,071,056. The principal exports were: Minerals and metals, \$9,343,155; rubber, \$6,214,355; sugar, \$6,717,256; cotton, \$4,932,038; alpaca wool, \$1,291,579; sheep wool, \$706,578; llama wool, \$343,616; guano, \$882,489; hides, \$441,020; straw hats, \$588,439; and petroleum, \$532,730.

Uruguay. - Value, \$46,318,036. The principal exports for the half year were: Wool, \$15,611,333; hides and skins, \$4,871,978; meats and extracts, \$4,653,515; live animals, \$469,307; tallow and other fats, \$635,404; hair and bristles, \$120,673; bone and bone ash, \$33,406;

residual animal products, \$80,881; oil-producing grains, \$319,067; flours, \$193,731; vegetables, \$43,460; and fruits, \$47,951.

Venezuela.—Value, \$22,684,384. The principal exports were: Coffee, \$11,390,208; cacao, \$3,601,371; balata rubber, \$2,449,068; hides, \$1,167,482; rubber, \$514,907; goat and kid skins, \$512,317; gold, \$644,212; live cattle, \$208,341; asphalt, \$267,553; copper ore, \$252,907; sugar, \$143,717; heron plumes—*aigrets*, \$309,847; *divi-divi*, \$161,237; tonka beans, \$137,173; and frozen beef, \$104,281.

IMPORTS.

Latin American imports are in general of the same character as the imports of western European countries and of the United States, except that they do not comprehend any large proportion of raw material for use in manufacturing.

Outside of foodstuffs, crude oils, lumber, coal, some unwrought iron and steel, building and construction material and the like, the great bulk of the imports are articles of a high degree of manufacture finished for consumption.

A brief summary under general heads of the imports of three countries—Argentina, Brazil, and Cuba—will suffice to give some idea of the character of these imports.

Argentina.—Value, \$355,806,365. In broad classifications the imports were as follows: Live animals, \$505,884; food products, \$28,456,664; tobacco, \$5,715,951; wines, liquors, and other beverages, \$13,385,195; textiles and manufactures thereof, \$67,607,452; oils, grease, etc., \$15,413,750; chemical and pharmaceutical products, \$11,812,926; paints, dyes, etc., \$2,371,473; timber, wood, straw, and manufactures thereof, \$10,088,562; paper and manufactures thereof, \$8,409,881; hides, skins, and manufactures, \$3,489,850; iron, steel, and manufactures, \$41,793,169; other metals and manufactures, \$15,015,295; agricultural implements and machinery, \$13,281,601; locomotion—railway cars, equipment, rails, etc., carriages, wagons, automobiles, bicycles, etc., \$35,759,418; earths, stones, coal, etc., \$32,296,044; building materials, \$32,775,761; electrical apparatus, \$6,483,163; miscellaneous, \$11,235,558.

Some of the principal imports classified under the headings above were: Cheese, \$1,908,741; sardines, \$1,071,751; sugar, \$3,675,383; rice, \$2,033,194; coffee, \$1,292,588; yerba mate, \$5,378,183; cigars, \$1,320,410; smoking tobacco, \$2,587,257; sheep dip, \$1,711,987; silk piece goods, \$2,065,201; ready-made clothing, wool, \$1,220,004; all wool piece goods, \$6,100,571; part wool piece goods, \$3,080,498. Under cotton: Yarn, \$1,261,309; quilts, \$1,048,202; lace, \$1,286,326; stockings, \$1,675,725; piece goods, bleached, \$3,904,267; unbleached, \$1,010,643; prints, \$3,932,223; dyed, \$9,527,297; other cottons,

COUNTRIES	EXPORTS AND IMPORTS TO AND FROM UNITED KINGDOM, GERMANY, FRANCE AND UNITED STATES, IN PROPORTION TO THE TOTAL FOR EACH REPUBLIC.				
	1911	SOUTH AMERICAN REPUBLICS EXPORTS			1911 100%
ARGENTINA	\$ 89 085 994	\$ 3 782 823	\$ 34 501 417	\$ 21 337 619	\$ 4 228 763
BOLIVIA					\$ 1 36 829
BRAZIL	\$ 46 820 115	\$ 47 212 339	\$ 25 719 496	\$ 5 835 747	
CHILE					\$ 1 36 829
COLOMBIA					\$ 1 36 829
ECUADOR	\$ 53 280 282		\$ 26 99 27		\$ 1 36 829
PARAGUAY	\$ 3 398 718	\$ 310 354	\$ 769 783	\$ 1 36 829	
PERU	\$ 2 797 063	\$ 4 630 747		\$ 1 36 829	
URUGUAY	\$ 4 870	\$ 480 319	\$ 48 852	\$ 13 337	
VENEZUELA	\$ 3 242 000	\$ 7 719 000	\$ 2 811 486	\$ 1 902 394	\$ 10 787 398
	\$ 766 377	\$ 17 983 201	\$ 1 579 604	\$ 2 100 000	\$ 7 083 261
		\$ 4 269 211	\$ 620 445		
IMPORTS					
ARGENTINA	\$ 705 378 307	\$ 63 888 345	\$ 36 463 126	\$ 50 702 708	
BOLIVIA					
BRAZIL	\$ 4 863 378	\$ 4 037 464	\$ 1 004 397	\$ 3 297 210	
CHILE	\$ 74 695 592	\$ 43 780 830	\$ 22 744 939	\$ 34 032 444	
COLOMBIA	\$ 40 765 052		\$ 32 836 771	\$ 351 444	\$ 1 36 829
ECUADOR	\$ 5 638 790		\$ 3 242 615	\$ 7 719 748	\$ 3 404 976
PARAGUAY	\$ 2 435 599	\$ 1 370 903	\$ 225 374	\$ 2 244 674	
PERU					
URUGUAY	\$ 8 358 363	\$ 4 598 565	\$ 407 748	\$ 269 342 1 370 340	
VENEZUELA	\$ 17 750 000	\$ 7 627 000	\$ 2 800 000	\$ 3 323 444	\$ 5 219 558
		\$ 5 253 865	\$ 3 195 943	\$ 1 057 564	
UNITED KINGDOM GERMANY FRANCE UNITED STATES OTHER COUNTRIES					

JOHN AMERICAN UNION

\$2,393,693. Sail cloth, \$1,236,445; jute and hemp bagging, \$1,741,922; lubricating oils, \$2,114,618; olive oil, \$3,262,135; kerosene, \$1,896,169; naphtha, \$5,938,656; proprietary medicines, \$2,279,263; perfumery, \$1,370,485. Iron and steel, in bars, ingots, or slightly wrought as wire, nails, staples, etc., \$22,198,895; iron and steel manufactures, \$19,594,273; coal, \$25,238,605.

Brazil. Value, \$257,762,557. The imports are divided into four general classes as follows: Live animals, \$1,116,102; primary materials and materials used in the arts and industries, \$50,192,456; manufactures, \$144,143,489; and alimentary substances, \$62,310,511. The principal imports of primary materials and materials used in the arts and industries were: 1,001 metric tons of cotton sewing thread; 1,900 tons of raw and carded cotton; 110 tons of rabbit and beaver fur; 5,762 tons of lead, tin, and zinc bars and plates; 2,213 tons of copper; 7,246 tons of steel bars and rods; 29,673 tons of iron bars, rods, and plates; 16,407 tons of iron ingots; 15,000 tons of jute and hemp yarn; 746 tons of woolen yarn; \$1,885,522 worth of pine lumber; 3,870 tons of linseed oil; 2,634 tons of white lead and zinc; 1,221 tons of turpentine; 2,588 tons of sulphur; 688 tons of broom straw; 12,285 tons of malted barley; 218 tons of hops; 254 tons of leaf tobacco; 1,736,213 tons of coal; 221,136 tons of coal briquets; 12,584 tons of coke; 286,689 tons of cement; 6,726 tons of asphalt; and 17,269 tons of tar.

The principal imports under manufactures were: Manufactures of cotton, mixed or not, \$24,853,755; guns and ammunition, \$2,281,197; carriages and other vehicles, \$5,858,239; manufactures of lead, tin, zinc, and alloys, \$502,696; manufactures of copper and alloys, \$2,663,584; manufactures of steel and iron, \$26,381,494; musical and like instruments, \$1,802,465; surgical and dental instruments and material, \$513,514; mathematical, physical, and optical instruments and material, \$650,372; manufactures of wool, mixed or not, \$4,027,937; manufactures of linen, \$2,587,043; manufactures of jute and hemp, \$316,156; earthenware, porcelain, and glass, \$4,538,992; machinery, engines, tools, and hardware, \$28,155,103; manufactures of wood, \$1,550,139; manufactures of gold, silver, and platinum, \$490,037; manufactures of straw, esparto, pita, etc., \$477,692; manufactures of paper, \$5,678,381; manufactures of earths, stones, and like substances, \$1,429,046; manufactures of leather, \$1,317,838; perfumery, paints, inks, etc., \$2,686,271; chemicals, drugs, and pharmaceutical specialties, \$5,989,167; manufactures of silk, mixed or not, \$1,265,720; and miscellaneous, \$17,564,249.

Under alimentary substances the principal imports were: 333,146 tons of wheat; 158,761 tons of flour; 34,241 tons of codfish; 3,618 tons of preserved fish; 1,916 tons of dried fruits; 3,988 tons of con-

densed milk; 1,181 tons of hams and bacon; 424 tons of canned meats; 2,059 tons of canned vegetables; 16,532 tons of rice; spirits and fermented liquors to the value of \$907,015; wines to the value of \$11,386,570; 26,651 tons of jerked beef; 1,960 tons of butter; and 1,783 tons of cheese.

Cuba. - Value, \$113,433,135. As classified the principal imports were: Stones and earths, \$1,076,947; the principal import under this heading was 854,806 barrels of cement. Mineral oils, bitumen, etc., \$1,069,976; the principal imports under this head were 7,118,284 gallons of crude petroleum, 488,184 gallons of refined petroleum, and 585,883 gallons of other refined oils. Glass and crystal ware, \$1,262,218; the principal imports under this head were 3,236 tons of tableware, 7,393 tons of bottles, 459 tons of electric lamps. Earthenware and porcelain, \$820,360. Iron and steel, \$6,513,248; the principal articles under this heading were 11,656 tons cast-iron bars, rods, etc.; 4,192 tons other manufactures of cast iron; 20,918 tons wrought-iron and steel bars and rods; 12,906 tons sheets and plates; 3,726 tons wire and cable; 435 tons fine tools and implements; 4,816 tons nails; 1,801 tons tin plate; 7,107 tons piping and fittings; and 12,455 tons steel rails. Chemical products, \$3,062,802; the principal imports under this head were 20,969 tons commercial fertilizers, 2,074 tons acids, 426 tons dynamite, 21,340 tons salt, and \$251,511 worth of patent and proprietary medicines. Oils, soaps, etc., \$2,157,373; the principal imports under this classification were 122,386 gallons soap oil, 358,648 gallons other vegetable oils, 1,095 tons candles, 4,261 tons common soap, 2,230 tons soap grease, and \$517,830 worth perfumes. Cotton and manufactures, \$9,278,430; the principal imports under this head were 711 tons raw cotton, 285 tons thread and yarn, 4,496 tons plain tissue, 1,731 tons twilled pieces, 525 tons knitted tissues, 156 tons laces, and 200 tons ready-made clothing. Vegetable fibers (other than cotton) and manufactures, \$3,360,276; the principal imports under this head were 380 tons twine, 572 tons cordage and rope, 11,881 tons sugar bags, and 1,696 tons linen tissue. Wool, hair, and manufactures, \$1,181,783; the principal import was 487 tons woolens. Woods and manufactures, \$2,767,191; the principal imports were 10,890 tons common lumber, 5,639 tons furniture, \$741,593 worth boxes and cases, \$570,253 worth barrels and staves. Manufactures of leather and furs, \$4,756,954; the principal imports were 861,884 pairs men's shoes, 1,783,245 pairs women's shoes, 1,186,948 pairs children's shoes, and 260,534 dozen pairs alpargatas. Machinery, \$9,136,992; the principal imports were sugar and spirit-making machinery, 57,659 tons, worth \$5,178,394; agricultural machinery, 553 tons, worth \$117,337; boilers, 948 tons, worth \$116,186; locomotives, worth \$423,697; and other machinery, 6,496 tons, worth \$1,639,643.

Apparatus, cars, carriages, etc., \$3,061,803; the principal imports under this head were 25,356 sewing machines, 1,262 typewriters, 17,825 weighing scales, railway coaches worth \$166,520, carriages and accessories, worth \$756,308; freight cars, 14,710 tons, worth \$1,021,788; and wagons and carts, 3,378 tons, worth \$310,819. Meats, \$10,630,504; the principal imports were 17,402 tons jerked beef, 7,659 tons salt pork, 1,928 tons hams and shoulders, 29,698 tons lard, and 1,815 tons canned meats. Fish, \$1,569,648, of which the principal import was 8,849 tons codfish. Breadstuffs, \$12,989,272; the principal imports under this head were 18,482 tons oats, 136,118 tons rice, 4,832 tons barley, 74,843 tons maize, and 851,447 barrels flour. Vegetables, \$4,491,995; the principal imports were 10,182 tons



CENTRAL BANK OF EXCHANGE BUILDING IN THE CITY OF HAVANA

onions, 7,766 tons peas, 14,823 tons beans, 54,388 tons potatoes, and \$498,600 worth tinned vegetables. Beverages and food oils, \$3,224,093; the principal imports were 1,319,908 gallons olive oil, 274,568 gallons cottonseed oil, 31,411 dozen bottles white wine, 454,468 gallons white wine, 20,414 dozen bottles red wines, 5,055,236 gallons red wines, 413,678 dozen bottles of beer, and 430,095 liters distilled liquors. Dairy products, \$2,657,031; the principal imports under this head were 15,611 tons condensed milk, 849 tons butter, and 2,312 tons cheese. Other alimentary substances, \$4,299,048; the principal imports were 11,697 tons coffee, 720 tons confectionery, and 4,288,608 dozen eggs.

DISTRIBUTION OF TRADE EXPORTS.

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In total of values the United States leads in the foreign commerce, imports and exports together, of Latin America.

All Latin America, 1911.

	Total.	United States.	United Kingdom.	Germany.	France.
Volume,	\$2,431,164,161	\$704,521,251	\$565,284,018	\$356,258,933	\$209,710,363
Per cent of whole	100.00	28.98	23.24	14.65	8.63

Of the 10 North American Republics—Mexico, Guatemala, Salvador, Honduras, Nicaragua, Costa Rica, Panama, Cuba, the Dominican Republic, and Haiti—the United States takes nearly three-fourths of their exports and furnishes more than half of their imports.

North America, 1911.

	Total.	United States.	United Kingdom.	Germany.	France.
Export	\$344,550,191	\$241,974,119	\$33,705,909	\$25,315,258	\$17,560,977
Per cent of whole	100.00	72.32	10.08	7.55	5.25
Imports	\$261,647,463	\$138,881,644	\$33,526,439	\$25,549,773	\$16,119,091
Per cent of whole	100.00	53.16	12.77	10.16	6.17

Of the 10 South American Republics—Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela—the United States takes more than one-fifth of their exports and supplies about one-seventh of their imports.

South America, 1911.

	Total.	United States.	United Kingdom.	Germany.	France.
Export	\$942,135,273	\$194,077,163	\$237,625,274	\$139,268,530	\$97,765,291
Per cent of whole	100.00	20.59	25.11	14.78	10.37
Imports	\$893,131,174	\$129,588,325	\$261,424,396	\$165,125,372	\$78,265,004
Per cent of whole	100.00	14.50	29.27	18.48	8.76

While the United States leads in the total commerce of Latin America as a whole, and in the commerce of the North American Republics, in both imports and exports, controls a trade greater than the combined trade of its three nearest rivals, the United Kingdom, Germany, and France, and in South America is second in exports and third in imports, yet as a matter of fact it is questionable whether in the import trade of Latin America the United States, with its \$268,470,000 in values, receives as much commercial advantage therefrom as does Germany with its \$191,675,000, or France with its \$94,384,000. The reason for this doubt exists in the character and kind of the imports from the United States as compared with the imports from Europe.

The Latin American imports, and particularly South American imports from the United States, are for the greater part such as in ordinary parlance are denominated "raw," "unmanufactured," or "slightly manufactured," while the imports from the United Kingdom, Germany, and France are almost entirely manufactures of a high degree. In other words, in imports from the United States the greater part (in some cases nearly all) of the value of the articles is represented in the raw material, and less than one-half in the labor, skill, and industry entering into their manufacture. The converse is true of the imports from the three European countries mentioned. Therefore it can readily be seen that the \$94,384,000 of imports from France may represent a greater return to French labor, skill, and industry and be of more benefit to French commerce than the \$268,470,000 of imports from the United States be of benefit to that country.

In illustration of this point, the case of Chile may be taken as an example. In round numbers Chilean imports from the United Kingdom in 1911 were \$40,800,000, from Germany \$32,700,000, from France \$6,900,000, and from the United States \$15,800,000.

The value of what was classified as mineral products was over \$25,000,000, of which Germany furnished \$9,690,000, the United Kingdom \$7,462,000, the United States \$3,980,000, and France \$2,648,000. Steel and iron in bars, sheets and plates, ingots, nails, piping, wire, and steel rails accounted for nearly \$3,000,000 of the imports from the United States, which country was but little or not at all represented in cutlery, household and kitchen utensils, tools, gas, electric-light, and water meters, wagon and carriage tires, saddlers' hardware, pipe fittings, axles, wire cable, carriages, furniture and ear springs, bolts, nuts, screws, and, in fact, all classes of highly wrought iron and steel goods.

The value of what are classified as vegetable products was over \$13,000,000, of which Germany furnished \$2,757,000, the United States \$2,067,000, the United Kingdom \$1,674,000, and France \$412,851.

Cottonseed oil, rosin, staves, and rough pine lumber accounted for \$1,686,300 of the imports from the United States.

The value of what was classified as textiles and manufactures thereof was \$28,711,000, of which the United States furnished only \$796,211. Of this amount cotton bagging, rope, twine, thread, flannel and gray shirting accounted for \$690,000. In linen, wool, and silk it is scarcely represented. In ready-made clothing of all kinds and high-class textiles of all materials the imports from the United States were of a negligible amount.

The value of what was classified as combustibles, oils, and paints was \$18,994,043, of which the United Kingdom furnished \$9,141,060,

LATIN AMERICAN EXPORTS AND IMPORTS

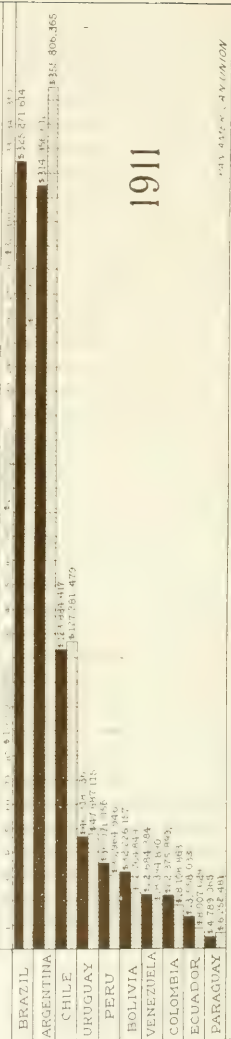
NORTH AMERICAN REPUBLICS



1911

SOLID LINES SHOW EXPORTS
RULED LINES SHOW IMPORTS

SOUTH AMERICAN REPUBLICS



1911

U.S. CUSTOMS, WASHINGTON

\$1,276,685,464. TOTAL EXPORTS \$1,154,778,637 TOTAL IMPORTS

Germany \$1,395,395, the United States \$2,711,505. Coal oil, most of it unrefined, accounted for \$2,320,305. In addition there was some trade in turpentine, lubricating oil, a little coal, and some paraffin. In the cheaper kinds of prepared paints the United States makes no showing.

The value of paper, cardboard, and manufactures thereof was \$4,052,960, of which Germany furnished \$1,996,185, the United States \$1,086,240, the United Kingdom \$453,330. News print paper accounted for \$736,351 of the imports from the United States. There were some printed books and bank checks, bonds, etc., but for the most part the United States was practically unrepresented in high-class paper manufactures.

The value of what was classified as pharmaceutical and chemical products and perfumery was \$2,735,638, of which Germany furnished \$1,036,016, the United Kingdom \$677,330, France \$400,843, and the United States \$297,000.

The value of what was classified as machinery, implements, and tools was \$15,523,267, of which the United Kingdom furnished \$5,847,592, Germany \$5,162,268, and the United States \$3,603,645. Agricultural machinery and implements, with some sewing machines, scales and balances, adding machines, and pianolas, make up the bulk of the imports from the United States.

The value of what was classified as arms, ammunition, and explosives was \$1,472,227, of which the United States furnished over \$294,737, nearly two-thirds of this being dynamite.

It must not be understood that in their class the imports from the United States were of a lower or cheaper grade than those from other countries; quite the contrary is true. In their class they were as a rule the highest in grade. This is particularly true of leather, steel, and iron goods of all kinds. The difficulty is that the class is as a rule low, in other words, imports of the kind approaching raw material.

In this connection a distinction must be drawn between the South American republics and the North American republics in a comparison of the character of their imports from the United States and from Europe. In the North American republics the imports from the United States as compared with those from Europe are of a decidedly higher character. In Cuba and Mexico particularly very many of these imports are almost on a par with the imports from the United Kingdom and Germany, and this higher character in imports extends in a diminishing degree more or less into the Northern republics of South America—Colombia, Venezuela, and Ecuador. For example, in Chile nearly 15 per cent of the total imports are from the United States, yet in textiles and manufactures the United States furnishes less than 3 per cent, and this 3 per cent

is made up almost entirely of cotton bagging, rope, twine, thread, and low-grade cotton cloths.

In Cuba the United States furnishes a little over 50 per cent of the total imports, and in textiles and manufactures about one-sixth of the imports of this class of goods. In cotton, in plain weaves it furnishes \$582,500 out of a total of \$2,362,000; in twills \$283,000 out of a total of \$995,700; in knitted tissues \$76,200 out of a total of \$1,615,300, and in ready-made clothing \$92,300 out of a total of \$254,000. It is fairly well represented in passementerie, piqués, cotton velvet, and the like. In wool it furnishes \$28,300 out of a total of \$55,135 in ready-made clothing. In other woollen manufactures it is but little represented. In silk it furnishes \$27,600 out of \$113,600 in plain silk tissues. It furnishes nearly \$50,000 out of \$106,700 of ready-made clothing. In other silk manufactures it is fairly well represented. In other fibers linen, hemp, etc. it is not very well represented. The same comparisons would hold good of most other manufactures, that in Cuba and in other North American republics the imports from the United States are of a decidedly higher grade than the like imports of the South American republics.



Mitchell Photo.

PAN AMERICAN NOTES

DEATH OF PRESIDENT ARAUJO

THE Pan American Union records with sincere sorrow the unfortunate termination, on February 9, of the life and career of Dr. Manuel E. Araujo, the late President of the Republic of Salvador. His sudden and tragic death is deeply deplored in official circles everywhere by all those interested in Latin America. Dr. Araujo, still in the prime of life, had gained an enviable reputation by his just and liberal administration of the office of Chief Executive, while the country itself was prospering and growing in a vigorous manner. Little wonder, then, that the Republic of Salvador was cast into deep gloom at the demise of its President.

Dr. Araujo was born in Juayua about 47 years ago. He studied medicine at the University of San Salvador, graduating with honors when he was only 22 years old. After practicing his profession for several years and distinguishing himself as an able surgeon, he became interested in agriculture and at the same time took an active part in politics. In 1907 Dr. Araujo was elected vice president of the Republic, serving with his predecessor, Gen. Figueroa, until his own inauguration as President on March 1, 1911. In signal tribute to the late President, the national flag of the Republic of Salvador and the pennant of the Pan American Union were displayed from the building at half mast from the time the sad news was received at this office until after the funeral had taken place.

WELCOME TO MINISTER FROM PARAGUAY

The Pan American Union extends a cordial welcome to His Excellency Héctor Velázquez, the new minister of Paraguay, recently arrived in Washington. Dr. Velázquez has served his country faithfully in the several important public positions he has been called upon to fill, and particularly as a member of the Paraguayan Senate. His activities have also been successful as a physician, as professor and dean of the faculty of medicine, and as director of the national department of hygiene. He has also been president of the National University of Asunción, and during his term many important reforms were instituted with marked success.

For eight years our sister Republic of Paraguay has not been officially represented at Washington, and it is a source of gratification to welcome its diplomatic representative to the governing board of the Pan American Union, to whose support the Paraguayan Government has always contributed.



SR. DR. HÉCTOR VELÁZQUEZ.

Envoy Extraordinary and Minister Plenipotentiary of Paraguay to the United States.

THE PAN-AMERICAN SOCIETY OF THE UNITED STATES.

The Pan American Society of the United States held its annual meeting on February 10, at the chamber of commerce rooms in New York City. There was a large attendance of members who listened to an interesting speech by Hon. Henry White, president of the society, and to the reports of Frederic Brown, treasurer and assistant secretary. A number of amendments to the constitution were passed and officers were elected for the ensuing year, as follows: President, Henry White; honorary presidents, the Secretary of State of the United States, the Brazilian ambassador; chairman of the executive committee, Cleveland H. Dodge; vice presidents, Lloyd C. Griscom, Cabot Ward, John Barrett; honorary vice presidents, Elihu Root, Andrew Carnegie, Archer M. Huntington, Melville E. Stone, John Bassett Moore; secretary-treasurer, Frederic Brown; executive committee, John Barrett, Edwin J. Berwind, Nicholas Murray Butler, Lorenzo Daniels, Cleveland H. Dodge, Thomas Eddy, James A. Farrell, James W. Gerard, Lloyd C. Griscom, Ramon Guiteras, Thomas Kearny, Minor C. Keith, J. P. Morgan, jr., James M. Motley, Frank A. Munsey, Lewis Nixon, Charles D. Norton, L. S. Rowe, Charles M. Schwab, Albert Shaw, Frederick Strauss, William R. Shepherd, Charles H. Sherrill, James Speyer, Frank A. Vanderlip, Paul Warburg, Henry White, Ernest H. Wands, Cabot Ward. The report of Mr. Brown was remarkably interesting and proved conclusively the usefulness of the society in its great purpose of promoting acquaintance between representative men of the United States and those of Latin America, showing hospitality and attention to representative Latin-Americans who visit the United States, and taking other steps to develop good understanding, true friendship, and mutual knowledge of each other among the American Republics and peoples. A special vote of thanks to Mr. Brown was passed unanimously by the society in appreciation of his services.

HANDBOOK ON THE PANAMA CANAL.

The demand for the Handbook of the Pan American Union on the Panama Canal has been so steady that the edition ordered is nearly exhausted. It may be necessary to issue another edition, although it has been the intention to wait until autumn in order to be able to publish photographs of the great waterway as it will look when practically near completion. In this connection it is a pleasure to quote the following words from a letter recently received from the Right Hon. James Bryce, British ambassador at Washington. He says:

Your book, I think, contains the most interesting and useful information that I have ever seen. It is clear and lively way the sort of information which thousands and thousands of visitors will be glad to have.



Photograph by Harris Ewing

M. MARSHALL LANGHORNE, ESQ.,

Secretary of the United States Legation at San Jose, Costa Rica.

PAN-AMERICAN LUNCHEON.

A little gathering for luncheon at the Pan American Building, Sunday, February 9, 1913, brought together a group of prominent Senators, Congressmen, and others interested in the development of closer relations between the United States and Latin America and a corresponding number of Latin American diplomats. Many interesting speeches were made by these statesmen of the United States and of the Central and South American Republics, all of them breathing the spirit of closer relationship of both commerce and friendship. The Director General acted as host and his guests included: Sr. Don Joaquin Bernardo Calvo, minister of Costa Rica; Senator William Alden Smith, of Michigan; Sr. Don Ignacio Calderon, minister of Bolivia; Senator Hoke Smith, of Georgia; Sr. Don Federico Mejia, minister of Salvador; Senator Thomas P. Gore, of Oklahoma; Sr. Don Antonio Martin Rivero, minister of Cuba; Senator James E. Martine, of New Jersey; Sr. Don Carlos Maria de Pena, minister of Uruguay; Senator Obadiah Gardner, of Maine; Congressman Henry D. Clayton, chairman House Committee on the Judiciary; Sr. Don Federico Alfonso Pezet, minister of Peru; Congressman John J. Fitzgerald, chairman House Committee on Appropriations; Sr. J. F. de Barros Pimentel, secretary of the Brazilian Embassy; Congressman Henry D. Flood, chairman House Committee on Foreign Affairs; Sr. Don A. Algara R. de Terrenos, secretary of the Mexican Embassy; Congressman Swagar Sherley, of Kentucky; Hon. Henry White, former Ambassador to France; Hon. John B. Scott, secretary of the Carnegie Endowment; Hon. Hannis Taylor, former minister to Spain; Sr. Don Francisco J. Yanes, Assistant Director of the Pan American Union; Mr. Henry L. Sweinhart, and Mr. William A. Reid, of Pan American Union staff.

"FAIR PLAY" AND LATIN AMERICA.

As an illustration of the growing demand for information about Latin America there can be cited the fact that Fair Play, published in New York, of which Leopold Grahame is the editor, has established a regular Latin-American section in which it will discuss the commercial, political, and general progress of the Central and South American countries.

ADDRESSES OF SECRETARY OF STATE KNOX.

A little volume just published will be much appreciated and enjoyed by all those who are interested in the development of closer relations between the United States and the countries of the Caribbean. It is entitled, "Speeches incident to the visit of Philander Chase Knox, Secretary of State of the United States of America, to the countries of the Caribbean, February 23 to April 17, 1912." A number of copies of this book has been placed in the hands of the Pan American Union, and this office will be pleased to send them to those

who may make application. As the reader peruses the addresses of Secretary Knox and the responses which were made by representative Latin-American statesmen, he is deeply impressed with the good sense, cordiality, and practical suggestions which pervade them all, and he is convinced that journeys of this kind can not fail to be productive of closer understanding between the United States and its sister republics.

STATUE OF GEORGE WASHINGTON IN BUENOS AIRES.

The attention of the Pan American Union has been brought to the efforts of Americans to provide funds for erecting a statue of George Washington in Buenos Aires as a gift to the Argentine Government. The total cost will approximate \$14,000. Of this sum \$3,000 yet remains to be raised, and it is hoped that all good Americans who wish to promote closer relations with Argentina, especially those who have done or are doing business in that country, will contribute to efface this deficit. Subscriptions for this fund may be sent to the accountant, Pan American Union, Washington, D. C., who will deliver receipt for same and will forward the money to the committee in charge, who will, in turn, send additional receipt.

ADDRESSES AND TRAVELS OF GEN. RAFAEL REYES.

Among the distinguished Latin Americans who have visited the United States recently is Gen. Rafael Reyes, who has been spending the greater part of January and February in New York and will presently proceed to Latin America for a general tour of its different capitals and countries. At the annual dinner of the Explorers' Club, held at the Hotel Astor on Tuesday, January 28, 1913, he was the guest of honor and delivered an address on his geographical researches in Latin America and also on the general subject of the possibilities of scientific, industrial, and commercial development of the great interior territory of South America. He was also recently a guest of a group of bankers of New York, when he pointed out the great importance of the establishment of banks throughout South America controlled by United States capital. It is understood that it is his plan to write a book after his visit to Latin America along the same lines as that recently published by the Right Hon. James Bryce, the ambassador of Great Britain, entitled "South America Observations and Impressions." In view of Gen. Reyes's intimate knowledge of the countries of the South, a work of this kind should be of timely and permanent value.

A YOUNG PERUVIAN PLAYWRIGHT.

In literary and dramatic circles of the United States a young Peruvian, Don Alfonso Washington Pezet, son of the Peruvian minister in Washington, is attracting much attention for his work



WASHINGTON BEARD

THE NEW YORK THEATRE

THE NEW YORK THEATRE

merit in the hands of theatrical managers.

as a clever playwright. He gives promise of making a reputation for himself which will be a credit to the illustrious name he bears, for he is a great-grandson of Don Jose Antonio Pezet, former President of Peru, and to his native land, which has produced many eminent writers. Don Alfonso Pezet is a native of Lima, the capital of Peru. He spent his childhood in England and France, and came to the United States about 13 years later, attending the public schools at Washington while his father was first secretary of the legation. After receiving a preparatory education at St. Johns, Annapolis, he entered the Massachusetts Institute of Technology; but, finding a greater aptitude for the drama than for engineering, he gave up his plans for building railroads to write plays and do what he could to promote the drama. At the present time he has two plays in the hands of managers in New York which have fair prospects of early production.

SPEECHES BY MR. J. P. SANTAMARINA.

Mr. J. P. Santamarina, the well-known trade expert of the Argentine Republic, now in the United States, reports special interest in the addresses which he is delivering at different places in regard to Argentina and other countries of Latin America. He is to be congratulated on the fact that the board of education in New York City has engaged him to deliver a series of addresses under their auspices in that city. One of the most notable speeches he has made of late, and which has attracted a great deal of attention, is that before the Springfield Board of Trade, Springfield, Massachusetts, on January 23, 1913.

VISIT OF PROF. BRANDON TO CUBA.

There has recently returned from a visit to Cuba Prof. Edgar Ewing Brandon, of Miami University, who carried a commission from the Pan American Union to investigate educational conditions in that Republic. An article by him on this subject will appear in an early issue of the MONTHLY BULLETIN. He speaks most highly of the impressions he gained from his visit to Cuba and he has great hopes for the future of that country.

"WORTH WHILE" MAGAZINE.

Worth While is an interesting magazine devoted to people, politics, and national affairs, published in Washington by Henry Curtis Biggs. As it is his plan to give considerable attention to the foreign commerce of the United States and to the commerce and relations with Latin America, it is to be hoped that he will meet with success in this new undertaking.

PAN AMERICA IN THE MAGAZINES

Remarkable Civilization of the Ancient Incas, by Walter Beasley, in the January number of *The Bay View Magazine*, is a most interesting and entertaining article dealing with this fascinating subject. Probably the most fruitful field for the study of American archaeology is found in Peru and Bolivia, and explorations and researches dealing with Incan and pre-Incan civilization have been prosecuted for many



PERUVIAN POTTERY

years. Repeated expeditions have added to our knowledge of the remarkable Indians whose extensive empire dominated the Andean countries of South America from Ecuador in the north down even to middle Chile in the south. While the capital of the Incan Empire was located at Cuzco, Peru, the tribes inhabiting the countries far to the south were under its dominion.



Courtesy of the Bay View Magazine

WHERE WE ENTER CUZCO.

The ancient capital of the Inca Kings is to-day a town of over 15,000 souls, has railway connections, and is electric lighted. The population of Cuzco and the valley in which it was situated is said to have numbered between sixty and seventy thousand at the time of the conquest. The city and adjacent mountain sides are full of the ruins of Inca temples and fortresses, which bear mute testimony to the advanced civilization of the empire which fell before the Spanish invaders. Illustrating "Remarkable Civilization of the Ancient Incas," by Walter L. Beasley, in the January Bay View Magazine.



Courtesy of the Bay View Magazine

TRADITIONAL SEAT OF INCA JUSTICE, LAKE TITICACA, BOLIVIA



Courtesy of the Bay View Magazine.

PALACE RUINS OF THE INCAS ON LAKE TITICACA.

located principally along the lake, particularly on the eastern shore, as well as the adjacent mainland, abound in Inca antiquities, such as fortresses, temples, and palace foundations. (From "Remarkable Civilization of the Ancient Incas," in the January Bay View Magazine.)



Courtesy of the Bay View Magazine.

PALACE WALLS OF THE INCA KINGS.

without mortar." (From "Remarkable Civilization of the Ancient Incas," in the January Bay View Magazine.)

On the Transandean Railway, between Mendoza, Argentina, and Los Andes, Chile, and not far from the celebrated Transandean Tunnel, completed in 1910, is located the Punta del Inca, a natural bridge, where are found the hot springs which are the source of the Cuevas River. Here the first Spaniards who penetrated this region found large "tambos" which served to house the Incas who are said to have sojourned here to get the benefit of the curative properties of the medicinal waters of the mineral springs. One of these great tambos is said to have been erected for an Inca monarch and his court about the year 1046, when William the Conqueror was subduing our Anglo Saxon forefathers.

Among the archaeologists who have made extensive explorations in Bolivia and Peru is Adolph F. Bandelier, who first went there for Henry Villard in 1892. Subsequently he continued his researches under the auspices of the American Museum of Natural History, for which institution he gathered valuable and extensive collections of Inca antiquities. It is largely upon Bandelier's work that Mr. Beasley's article, which was originally published in the *Scientific American*, is based. The article is well written, and gives such a good survey of what was known of Incan civilization up to the time that it was published that extensive extracts are herewith given.

Under Inca sway and influence both Indian architecture and the various industrial arts reached their highest degree of efficiency. Few, if any, countries of modern times have equaled the extreme and skillful utilization of land that was practiced during the time that the Inca Empire flourished. In many localities they built their dwellings among rough rocks, on arid slopes of hills, in order to use the limited area of soil for agriculture. They terraced up every hill and mountain side until not a single spare foot of surface was left unimproved. They likewise constructed aqueducts for irrigation purposes, and also a series of magnificent roads, from 25 to 50 feet in width, paved with blocks of stone, which connected their royal capital at Cuzco with various Provinces. Part of the way these were cut out of solid stone and often ascended precipitous heights by a series of stone stairways. Traces of these roads still exist in many localities. * * *

On the islands of Lake Titicaca is located the traditional birthplace of the Inca Tribe, and here were built several large and imposing structures, the ruins of which still exist. Not far distant was located Cuzco, the chief settlement. The population of Cuzco and the valley in which it was situated is said to have numbered between sixty and seventy thousand. The language spoken was, and is now, Quicha. The whole place was built around courtyards or squares, and contained spacious buildings, constructed partly of huge, well-cut stones. The roofs, however, were of thatch. Some of the stones were of such stupendous size and dimensions as would test the best skill of the modern constructor to transport and put them in place. This was accomplished by means of wooden rollers, ropes, and crowbars. In most cases, no mortar was used, stability of the building depending on the skill in the close joining of the stone blocks.

The Government of the Incas is said to have been the most enlightened despotism that ever existed, and about the nearest approach to a Utopia which has yet been reached by any people. There was allotted to each man, free of charge, a dwelling site and extended area of land for him to cultivate for the maintenance of his family. The surplus of products from this tract, left over from the immediate needs of the



Person standing in front of the stone wall at the site of the ancient city of Jericho.



Fortress of P. Sa'depo. Treadwell. Fort Point. Cal.

FORTRESS OF SAC'SAHU AMAN, CUZCO, PERU.

One of the grandest and most imposing of pre-Incan ruins is that of the ancient fortress on the Sac'sahuaman hill overlooking the city of Cuzco. The hill was practically impregnable on two sides, and easily defensible on another. The eastern face, however, was exposed to easy approach, and here the great cyclone in work was constructed.



owner was given as tribute to the Inca Government, and used for religious, charitable and other purposes at their sovereign city of Cuzco. Under their wise and just civic administration, crime and public corruption and theft were not known. In Cuzco it is stated that a resident with a hundred bars of silver and gold piled up in his house, left it wide open, only placing a small stick across the door as a sign that the master was out—and nobody went in. Agriculture was the chief pursuit followed. Cotton, beans, maize, and cocoa were raised by the coast people. On the plateau the domestication of the llama and alpaca was the favorite occupation.

The whole tribe was divided into numerous clans. The powers of administration were centered in the elective dignitaries, a military leader, and the head of the religious system. There was also a council of chiefs. None of these offices were hereditary, and could not be occupied by sons unless they were specially chosen for the position. The succession of the chief Inca did not fall upon the shoulders of his child. This was due to the clan organization, which governed the affairs of state. Inheritance was by mother right. A man could not marry a woman from his own clan, but had to select one from another. This was the main unit for holding the tribes together. Woman had no voice in public affairs; but ruled supreme in the home. She was admitted to esoteric societies, of which there were many. They also practiced healing and became priestesses. Many complicated and elaborate ceremonial and religious rites were observed, and frequent sacrifices were offered up to their deities. The Incas, under their enlightened system of government, had, however, incorporated in their religious worship some uncanny customs. Human sacrifice was practiced, and on certain occasions a number of young maidens captured from other tribes were offered up to some of their principal deities. These young women were for a long time kept prisoners, and during the interval were employed at making pottery and weaving gorgeous fabrics out of the silk-like threads of vicuña wool for the sacrificial celebration. Owing to their extensive religious code, feasts and offerings of some kind were of almost daily occurrence, and the preparation for and the observance of these occupied a great deal of the time of the people. Contrary to statements hitherto made, the sun was not the chief object of worship, but the moon, stars, thunder, lightning, and many natural objects and phenomena were included in the religious code. In Cuzco some 40 different shrines existed.

Several paragraphs of the article deal with the evidences that the Incas were a music-loving people, drums, pan pipes, etc., having been found in the ancient ruins. The curious features connected with their interment of the dead in the Chulpas, or stone towers, and in the sides of cliffs which could not be used for agricultural purposes; the many interesting objects which have been found in these graves; the mummy packs and their contents; the burial of the dead in a squatting or crouched position; the finely woven woolen fabrics, etc., are all dealt with by Mr. Beasley. The remarkable development of the art of pottery which had been attained by the Incas is responsible for much of our knowledge concerning them, and this phase of archaeological research is thus dealt with in the article:

Of all the industries which occupied the attention of the greater part of the population, undoubtedly that of pottery was one of the most prominent. Specimens of this art are the most important and diversified of all the objects found in the graves. It was in the production of water vessels, jars, and vases that the inventive faculty of the Indian artisan was displayed to its fullest extent. Leaving no written language, nearly all of our knowledge of the people is due to the handicraftsman in clay, who



A ROYAL BUILDING IN THE AZTEC RUINS OF TENOCHTITLAN.

The Aztec ruins of Tenochtitlan, in the center of Lake Texcoco, Mexico, are the most important and best preserved of the ancient ruins of the Aztec civilization. The ruins are located in the center of the lake, and are surrounded by water. The ruins are made of stone and are very well preserved. The ruins are very large and are very important. The ruins are very well preserved and are very important. The ruins are very large and are very important. The ruins are very well preserved and are very important.



A LONG WALL IN THE AZTEC RUINS OF TENOCHTITLAN.

The Aztec ruins of Tenochtitlan, in the center of Lake Texcoco, Mexico, are the most important and best preserved of the ancient ruins of the Aztec civilization. The ruins are located in the center of the lake, and are surrounded by water. The ruins are made of stone and are very well preserved. The ruins are very large and are very important. The ruins are very well preserved and are very important. The ruins are very large and are very important. The ruins are very well preserved and are very important.



Photo 27. The Great Collection of Egyptian Pottery, Brooklyn, 1907, vol. 3

EGYPTIAN POTTERY

Probably three-fourths of the Egyptian pottery found in the middle of E. Hope and the United States came from the east, or west of it is both, the reason told by the prince of Cam. A distinguishing feature of the east pottery is the common "clothe-point," like an inverted Y, with two lines opening out to the sides, which are frequently crossed at the top. Many of these are seen in the picture as are some fine specimens representing the four, but the latter are of great interest in showing the character of the pottery of the ancient peoples of the east of Egypt, as well as illustrating their styles of working the clay and the kind of decoration and ornamentation common to them. The proficiency of the Egyptians in the art of pottery is fully dealt with in Mr. Barclay's article "Remarkable Civilization of the Ancient Egyptians," in the January-February View Magazine, Detroit, Mich.



pottery of Peru. There are hardly two specimens alike. Not only do we find almost every combination of regular, or geometrical figures, but earth, sea, and air are laid under contribution to supply shapes for the potter. Men, birds, animals, fishes, shells, fruits, and vegetables all find their reproductions in clay. Even the physical features of the ancient inhabitants—their architecture, customs, arts, and religious notions—find illustration and record in these most fragile, and yet almost imperishable, remains." (E. George Squier's Peru.)

made it a practice to represent faces, architecture, costumes and characteristic scenes of everyday life on his creations in pottery. The most elegant types are of fine brown and gray clay, with glazed surfaces, and show little or no granular mixture. These are considered the most beautiful form of Peruvian ceramics. In general, the bulging form prevails, although the shape varies according to the skill of the artist and the use intended. Some have a flat, others a cone or egg-shaped bottom. The latter were set on a clay base, with a funnel-shaped opening. This kind of pottery, with little or no plastic decoration, but handsomely painted and of chaste form, is the true Inca pottery made near Cuzco.

The most satisfactory and artistic productions in clay are thought to have been those in which the whole vessel was treated as a human head, with the attached mouthpiece serving as a headdress or covering. These portrait jars are especially noteworthy and highly prized, as they afford in most cases a lifelike representation of the face and features of the Peruvian coast Indians, as well as illustrating the technique. Forest animals and maritime creatures of the period, notably the great condor with his victim, were on the various forms of pottery met with. Probably one of the most extraordinary and remarkable pieces of pottery from an imaginative standpoint, at least, is one depicting a resting llama, with a sleeping child snugly clinging to its warm and fleecy back.

The great abundance of gold and silver in the time of the Incas, and their skill in soldering and fashioning these metals into striking shapes, are exhibited by the hundreds of personal ornaments, statuettes, and ceremonial objects wrested from burial places. Mosaic work on shells, supplemented by wide bands of gold, the ends terminating in a parrot's head, were evidently common household adornments. Necklaces of gold balls, nearly the size of a 25-cent piece, were evidently commonly worn. Huge drinking or ceremonial cups, nearly a foot high, of silver, and more than half that length of gold, wrought into portraits, attest the lavishness of display which flourished among the people. Long wrist bands of solid gold or silver were worn. Gold was secured by washing in the mountain torrents and streams.

Many additional facts relative to the Empire of the Incas and to the high state of their culture have been unearthed by Prof. Hiram Bingham and others since Bandelier's last explorations, and Peru and the Bolivian plateau continue to be the most interesting hunting grounds for our archaeologists. Very valuable collections were made during 1912 by Prof. Bingham, of which we await an account with much interest.

The Liberation of Bolivia, by Harriet Chalmers Adams and Franklin Adams, in the January Review of Reviews, is a most interesting article, dealing with the industrial awakening of the third largest country in South America. Lack of transportation facilities has been the great handicap in Bolivian progress and past conditions are strongly contrasted with those of the present by the authors of this article. Their extensive journeys in this country during the days when mule trains and "balsas" (reed boats) were about the only means of travel and their more recent observations enable them to write of this interesting Republic from the standpoint of personal knowledge.

The main theme of the interesting story of Bolivia's development and the building of the railroads is accentuated, but many paragraphs of beautiful description lend charm to the narrative and much valua-

ble information is given relative to the wonderful wealth which lies hidden in the mountain recesses, primeval forests, and virgin fields of this land of varied resources. The fine illustrations, ranging from photographs of native Aymara Indians to pictures of railway building, from the ancient burden-bearing llama train to the modern locomotive, lend added point and interest to the story.

The authors strike into their subject in the following terse, almost epigrammatic style:

At opening the portal of the Pacific Coast, Bolivia, America's richest mineral wealth, is busily engaged in striking paths.

Bolivia was long the hermit Republic. Years ago, to her, Europe's and America's eyes were turned to the Western World for metropolitan La Paz, the gem of the new world.

Highland La Paz has recently been penetrated by the Pacific, and by a third railroad. A fourth will join the Bolivian rails with the great Argentine.

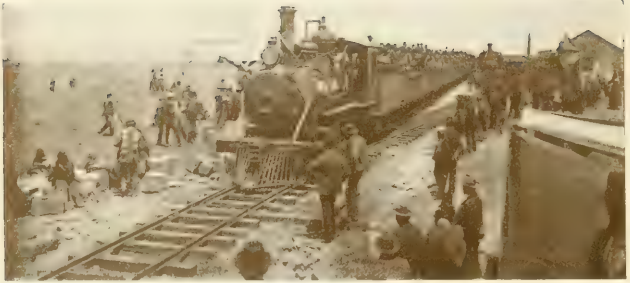


MEAL COMMEMORATING THE INAUGURATION OF THE RAILWAY FROM LA PAZ TO THE CITY OF COBIA, BOLIVIA, MAY 1905.

ARGENTINA. Two lines will link the Andean uplands with the navigable waterways tributary to the Amazon. Two more will unite the rich eastern agricultural lands and the La Plata River highway. On every side the pent resources of this mighty landlocked Republic will find an outlet. The commercial liberation of Bolivia is assured.

The topography of the country, its picturesque capital, and the beginning of railway building are thus graphically presented:

This fifth largest country in the New World lies wholly within the Tropics, yet altitude, rather than latitude, determines climatic conditions. From the lofty plateau of the Cordillera to the tropical ports of the Young Orinoco, the land descends from domain terraces down through smiling temperate valleys to the dense tropic jungle of the Amazonian plain. No greater contrast on earth can be pictured than that of the Titicaca Basin and the eastern frontier. The one, treeless, windswept, encircled by



INAUGURATING A NEW SECTION OF A RAILROAD IN BOLIVIA

Anticipating the opening of the Panama Canal, Bolivia, America's storehouse of mineral wealth, is busily engaged in spiking rails," say the authors of "The Liberation of Bolivia." (By Harriet Chalmers Adams and Franklin Adams, in the January Review of Reviews.)



RAILROAD AND TUNNEL ON THE ARICA LA PAZ RAILWAY

"Trans-Pacific connection, which brings La Paz within 14 hours of the coast, necessitates the use of 28 miles of cog system, reaching an altitude of 14,000 feet. The 267 miles of track cost \$45,000 a mile." (From "The Liberation of Bolivia," in the January Review of Reviews.)

the most stupendous of the Andes, the other is a narrow, high, jagged, and steeply rising wall, the whole a great wilderness. [The first] is a narrow, high, jagged, and steeply rising wall, the other is a narrow, high, jagged, and steeply rising wall, the whole a great wilderness. Precious metals, wrested from the Titanic strongholds of the Andes, rival nature's most lavish forest gifts.

It was in the bleak mining region, 2½ miles above sea level, that the Spaniards first settled after the conquest, and it is here that the greater portion of the population is found to-day. Two-thirds of the country lies in the lowlands, yet 88 per cent of the people live on the plateau. Man is rooted to his native soil. The life of the Bolivian highlander is as dreary as his environment, yet he can not often be tempted down into the garden places just over the Andean wall.

La Paz, the capital, has a less trying climate than the other upland cities. Although 12,500 feet above sea level, it lies on the floor of a narrow canyon sheltered from the icy blasts which sweep over the bleak Puna above. "Kaleidoscopic La Paz," we have called it—the most picturesque city of the Western Hemisphere—its low red-roofed buildings huddled between massive frowning walls. Above tower the Andean sentinels dominated by the snow-clad Illimani, "The White Lady," faithful guardian of this City of the Clouds. Below, in the steep lanes of the streets, the multicolored gowns of the coquettish Cholas and the comic-opera costumes of the coppery Aymarás give color to scenes of great charm and diversity. The modishly dressed men and women of the Bolivian upper class form the minority and seem strangers in this bizarre picture.

The day is here when progress, that buccaneer of the picturesque, will rob La Paz of her captivating individuality developed during the years when she lay far removed from the world's busy marts. Overland travel by mule trail to the coast then occupied many tedious weeks. The opening of the Arica-La Paz Railway in September, 1912, brings the Bolivian metropolis within 14 hours of a Pacific port. * * *

The first line to reach Bolivian soil was from the Chilean port of Antofagasta, far to the south of La Paz. This road, with a gauge of but 30 inches, was originally constructed for hauling ore cars from the near-by nitrate beds to the coast. Gradually extended, as the new nitrate deposits were located, it finally strayed, rather accidentally, into Bolivian territory. Realizing, suddenly, the advantage of a connection with La Paz, too late to change its gauge, this little toy track was strung along to Oruro within striking distance of the capital. The traffic increase was enormous, resulting in an earnest bid for passenger service and the final equipment of the line with modern sleeping and dining cars. This is probably the narrowest train de luxe in the world.

La Paz is only 200 miles from the sea as the bird flies, but the Antofagasta line climbs over 574 miles of desert and plateau before reaching Oruro, where it connects with a broad-gauge road, 146 miles in length, to the capital. The through semi-weekly service occupies about 48 hours. After leaving the nitrate fields, the scenery is majestically Andean. We are up in nature's attic. The Collabusi branch from Ollague is the highest railroad on earth, reaching an altitude of 15,809 feet. * * *

South America is no longer "Manaña Land." The "Time is money" sign has reached the country. Begrudging the 30 to 50 hours spent in traveling to the Pacific, Bolivia now cast an eye on the safe harbor of Arica, only 260 miles from La Paz. When Chile acquired Bolivia's coast line as a war indemnity, she also held the Peruvian Province of Tacna, in which Arica lies. And, in partial compensation for the loss of her seaboard, it was Chilean capital which gave the Arica-La Paz Railway to Bolivia.

This direct Pacific connection, which brings La Paz within 14 hours of the coast, necessitates the use of 28 miles of cog system, reaching an altitude of 14,000 feet. The 267 miles of track cost \$15,000 a mile. A unique method has been devised by the company for overcoming the effect of the quick ascent on weak hearts. Compartments supplied with air containing the sea-level amount of oxygen are provided. It only remains for the clever Yankee to invent an oxygen-smelling-bottle for the man who gets off up in Skyland.



COROCORO, THE GREAT COPPER CENTER OF BOLIVIA

One of the greatest copper districts in the world, not excepting our Lake Superior section, is tapped by the Arica-La Paz line. Last year this Corocoro district sent \$800,000 worth of copper ingots down to the sea by mule cart, and the new era should show startling figures." (From "The Liberation of Bolivia," in the January Review of Reviews.)



NEW GOVERNMENT PALACE AT LA PAZ

One of the beautiful modern buildings to be found in "Kalidoscope La Paz," the most picturesque city of the Western Hemisphere," described in "The Liberation of Bolivia." (In the January Review of Reviews.)



MINES OF SOUTH BOLIVIA, 1900

The early mule paths and cart roads have become the railway routes to the coast. They follow paths centuries before white men set foot in the land. Streams like this are now spanned by bridges. Mines near Oruro will add to the momentum." (From "The Liberation of Bolivia.")



A RIVER NEAR ORURO, BOLIVIA, 1900

The early mule paths and cart roads have become the railway routes to the coast. They follow paths centuries before white men set foot in the land. Streams like this are now spanned by bridges.

The mineral wealth of the country is touched upon in the following graphic manner:

From Rio Mulato (a station on the Antofagasta-Oruro line) a railroad 67 miles in length has recently been opened to Potosi. Potosi! How little this name means to you of the twentieth century! Yet 300 years ago it was a word to conjure with. "The richest city in the world," it was called—the magic aerial Mecca overseas. In those romantic days of early Spanish dominion, Bolivia was famed for her silver. Her pedestal still is of silvery hue; but to-day it is made of tin!

Potosi, the silver Province, has become the center of the Republic's chief export. Tin valued at \$16,000,000 was shipped out of the country last year. The Straits Settlements alone outclass Bolivia's production. Of the so-called common metals, it is the least widely distributed and one of the most costly. The tin deposits are in the Cordillera Provinces, high up in the Royal Range. We know a number of mines at an altitude of over 17,000 feet. The more important are equipped with modern



HYDRAULIC MINING IN THE CHUQUIAGUILLO RIVER.

The picture shows the application of modern processes in extracting the mineral wealth of Bolivia from its ancient beds, described in "The Liberation of Bolivia."

plants. Like gold, tin is taken from rock vein and alluvial deposit; but, unlike gold, it occurs in a compound, the richest grade ore containing 70 per cent of pure tin.

While this gleaming metal forms the backbone of Bolivia's export, supplying, at its present high price, almost two-thirds of the entire output, there is strong indication that silver may again be king. The Spanish Crown coined over \$1,000,000,000 worth of silver extracted from the famous "Cerro" of Potosi, but after 1873, when depreciation began, the production rapidly declined. A fall in transportation rates will hasten the revival and this year's discovery of four exceptionally rich silver mines near Oruro will add to the momentum.

The highlands are also rich in bismuth and copper. One of the greatest copper areas in the world, not excepting our Lake Superior section, is tapped by the new

Arica-La Paz line. Last year this Cochabamba district sent \$800,000 worth of copper ingots down to the sea by mule cart and the new era she did stow farther to go. It has long been known that the earth's richest sulphur deposit is at Tacana, also liberated by the Arica route. The Italian product, which has held the trade, now has a serious rival.

After dealing with the building of railroads in the jungle, such as the Madeira-Mannore, and the opening of the country relative to the stimulation of its agricultural resources and the likelihood of gold mining development, the authors conclude:

Bolivia has purchased her freedom. The \$30,000,000 she is now spending on railway expansion amounts to \$12 for every man, woman, and child within her territory—white, mestizo, and Indian. The "Song of the Rails" has become the national anthem and every rail spiked means life. We look forward to the day when the equable eastern lands will be populated. Here, in Nature's vast plantation, never-failing crops, rich beyond the reckoning, await the harvest and toward this garden spot of tropical America the tide of emigration must some day shape its course.

The opening of the Panama Canal sounds the bugle call of West Coast development. The first trans-Andine railway will soon have rivals. The hermit Republic of old is destined to become South America's greatest central highway when her rails link the roads of Peru and Chile with those of Argentina and Brazil.

The Dancing Indians of Bolivia, by William A. Reid, in the January number of *Travel*, is a delightfully entertaining description of the annual carnival held in La Paz, the capital of Bolivia. Mr. Reid, who was for five years the acting secretary of the Bolivian legation at Washington, had occasion to pay numerous visits to this interesting Republic, and was thus given opportunity to study the customs, habits, and manner of life of the picturesque descendants of the various ancient Indian tribes which still form a large element in the population of the remote districts of the third largest country in South America.

It was upon the occasion of one of these visits that Mr. Reid witnessed the scenes incident to one of their annual fiestas and the following excerpts will give some idea of the entertaining style in which he deals with his subject:

Landing at Guaqui, on the Bolivian frontier, we found the Indian population preparing for the annual carnival or fiesta. This fact presented a pleasing foretaste of events destined to occur at La Paz, the capital city, 40 miles distant. * * *

The first sight of the Bolivian metropolis from the Crusero Alto, the heights where the steam railway ends, is indescribably grand. The city itself stretches for several miles over the plain; the red tile roofs of the sky-blue houses (many of the houses are blue or other fancy color) interwoven among the trees, the awful barrenness of the snow-capped mountains, seen through the clear atmosphere, unite to form a most striking panorama. Add to these natural charms the carnival season with its gaieties and fantastic costumes of the Indians and a more pleasing picture could scarcely be found.

From the modern electric car, as it followed a circuitous course down the mountain sides into the city, we could see the Indians gathering on the open plain below. We could faintly hear their weird music and even discern the gay colors of their blankets





1871

The authors are indebted to the Ministry of Education of the USSR for the award of a grant for the study of the problem of the structure of the $\text{Fe}(\text{NO})_2$ complex.

and clothing. From every direction they could be seen marching and chanting and dancing as they proceeded to their general rendezvous.

Before the day closed probably 5,000 Indians had assembled, including representatives of numerous tribes. Descendants of the aristocratic Incas, many of the visitors traveled to the fiesta over the very same roads that were constructed by their ancestors centuries ago. Some of them may even live in the age-worn huts handed down for generations and which are to be seen to-day in the Andean highlands.

The Indian population of Bolivia is believed to number nearly 1,000,000. As in North America, they are divided into numerous tribes, some of which are warlike, but the majority are peaceably inclined and contribute largely to native industries. The Aymará Indians occupy a territory surrounding Lake Titicaca and including a large part of the Departments of La Paz and Oruro, Bolivia. Closer acquaintance shows them to be strong and muscular, of medium height and of a complexion somewhat darker than their fellow Indians of North America. They are said to be industrious and to be religiously inclined. High cheek bones and general appearance—excepting clothing, of course—reminiscent of the sturdy Japanese seen in the rural districts of the Orient.

The following is Mr. Reid's graphic picture of these Indians as they perform their native dance:

Each native appears to have tried to outdo the other in the extravagance and style of dress. All are well clad, it might be said, for the Aymaras are adepts in the art of weaving cloth from the wool of the llama and the vicuña, and their best skill has been called into service in preparing for this great fiesta. The women are curious and interesting specimens of their sex. Clad *a la mode*, they attract the attention of the foreigner at once on account of their odd figures, made so by reason of the number of skirts worn, some of the most fashionable wearing as many as 20 at one time, with each skirt of a different color and all of the most brilliant shades.

The body is covered with a gaudily embroidered waist, which hangs loosely about the shoulders, and which we were told had occupied the attention of the wearers for weeks or even months, and a close inspection reveals the vast amount of patience and skill possessed by the makers. A small light-colored felt hat with very narrow brim completes the dress. From under the hat two long plaits of raven-black hair hang down to the waist, while neither shoes nor stockings adorn the feet of many of the women. This barefoot habit is very common. * * *

When the dancing is very active a perfect frenzy seems to seize both man and woman; they sing and chant and howl, making a noise not at all pleasing to the stranger's ear. Hands are joined in forming a great circle with scores or even hundreds of beings composing the links. The whole circle moves around rapidly, first in one direction, then reversing, and at times sweeping as a great human wave over an acre or more of ground, until the chain breaks and the members spin around very rapidly, somewhat resembling the motion of a child's top. The women continue longer than the men, and here the former have the longed-for opportunity of displaying their many skirts, which of course rise higher and higher the faster the dance whirls.

These skirts are indeed marvels to behold, and when the wearer is whirling they almost conceal the head and body, and being so numerous and of such brilliant hues, they form an animated object both interesting and curious. When it is remembered that there may be hundreds of men and women in one circle and that there are many circles active at the same time, some idea may be formed of the animated scene.

The ubiquitous peddler seems to be a characteristic feature not lacking even in a Bolivian carnival, but here his wares seem to be a little out of the ordinary, and according to Mr. Reid's account:

His goods and wares are brought thither on his back or upon that of the sacred and ever-faithful llama, and he may have traveled across mountain and valley for



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THE AYMAR DANCE IN FULL SWING.

The hostess, seated into the front of the occasion with the best of her art and fashion, perfect beauty. In the foreground, and in the background, the women are to play the ayumar dance. The picture, by William A. Reed, in Emma's Travel.

days. His storehouse is the great outdoors and his counter is Mother Earth. Curious and novel are the wares offered for sale: Baskets, sandals, pottery, lace, silver pieces, gold nuggets, ornaments, miniature figures, wonderfully woven ponchos and many other articles, crude as well as of the most skilled workmanship, that would charm the North American curio hunter. Think of the tiny dolls, so very small that they may be compared to the wasp or even to the mosquito, and yet when placed under the magnifying glass show excellent workmanship and are costumed in the so-called height of fashion. Other fine pieces of handicraft especially noticeable are the tray and goblets and pitcher, all made of wood and yet so small that the whole may be passed through the finger ring of a child.

Altogether the article is original, entertaining, and instructive and is illustrated with photographs of scenes and individuals taken by Mr. Reid, which add to its interest.

Argentina and Its Capital, by Don Juan S. Attwell, is the leading article in *The Bay View Magazine* for January. After giving a brief historical sketch of the country's early struggles for liberty, the author deals with the Argentine Republic of to-day and gives some startling facts of its wonderful development. The commercial, industrial, and agricultural progress of the country are dealt with as follows:

In 1857 the first railroad was built in Argentina, and at the close of 1911 there were 15,000 miles in operation. Lines now radiate from Buenos Aires to every considerable town and city in the country, and these lines are equipped with Pullman cars and as fine rolling stock as can be found in the United States. There are two transcontinental lines from the capital. The beneficial influence of the railway development on agriculture will be seen from the report of the wheat crops. Twenty years ago Argentina did not produce enough wheat for the demands at home; indeed it was necessary to buy 5,000,000 bushels abroad. In 1910 Argentina not only raised enough wheat for its home needs, but sent 71,000,000 bushels to the markets of Europe, and in 1911 the value of the cereal crop reached the enormous sum of nearly \$400,000,000. In 1911 there were 17,242,000 acres sown to wheat. Were all in one field, it would be half as large as the State of Illinois. All the agricultural and grazing interests are on a colossal scale. Sixty-seven million sheep are now grazing on the almost boundless pampas; while 29,000,000 cattle, 7,500,000 horses, 4,000,000 goats, 1,400,000 hogs, and 239,000 ostriches were counted by the last census. Most of the farms are held in very large tracts and are farmed by colonies, largely made up of Italians and Germans. A hundred miles from Buenos Aires is an estate 105 miles square, comprising 700,000 acres, stocked with 40,000 cattle, 17,000 horses, and 200,000 sheep. Usually the Argentine farms embrace 250 to 6,000 acres. The General Government is giving large attention to improving agriculture and maintains nine experimental farms, where the latest and best machinery methods and science are being introduced, and by which all the Republic will be benefited. The growth of Argentine agricultural and grazing industries has built up an enormous ocean carrying trade, in which 4,000 vessels are engaged between its ports and Europe alone. Sixteen years ago the volume of exports and imports amounted to \$227,000,000, and it has ever since been growing by leaps and bounds. In 1911 the grand total was nearly \$690,000,000. Millions of dollars of American and English capital have been invested in Argentina under the promise of rich returns, which have in the main been realized. The last census report established the fact that a very large majority of the industrial works of

all sorts were in the hands of alien owners and under foreign management. There is here, therefore, opening for improved American machinery and Yankee enterprise.

According to Mr. Attwell the American laborer, however, had better stay away, owing to the competition of the cheaper labor from Italy and other European countries.

The author gives very comprehensive descriptions of Buenos Aires and closes with the following paragraph:

Argentina is about the last of the world's vast domains open to the first settlers. There are yet millions of acres open, but most of these will be taken in the next decade or two. The field is most inviting to American capital, and as political affairs are in a settled condition, there is larger security with great profit. Our masters of industry are wide-awake to the fact that those who now enter Argentina will control its great home markets for all time to come, and accordingly our bankers, manufacturers, and organizers are alert to the situation, and are going there in increasing numbers. There is a strong North American bank in Buenos Aires, large commercial houses there and in other cities, and we are destined to divide with England the industrial business of the land. In 1907 the world sold to Argentina goods worth \$318,268,000, and of this our country had over \$39,000,000. In 1910, 133 steamships sailed from New York for Argentina; in 1911 141.



THE PERUVIAN MOUNTAIN MAN.

PERUVIAN MOUNTAIN LIFE.

A description of the Incas, who ruled over a vast domain in the Andes, and of the present state of the Peruvian Indians, is given in the article by Gerald Guinness, published in the January issue of *The New York Magazine*.

Descendants of the Incas, by Geraldine Guinness, is another article in the *Bay View*

Magazine for January, dealing with the lives, customs, hardships, etc., of the Indian population of Peru. The author draws a somewhat pathetic picture of the remnant of this vanishing race and in dealing with the religious side of their lives the prejudice and zeal of the Protestant missionary is but thinly veiled.

The closing paragraphs of the article which deal with the peculiar, plaintive music of the Peruvian Indians are interesting as showing

the strain of sadness which seems to underlie the apparent stoicism of the race. In this connection the author writes:

Certainly the yaravis of Peru are unlike any other music. When first I heard their plaintive notes come wailing through the night air I listened spellbound to this new thing. As I came to know and love the ancient melodies they took hold of me in a strange way. An Indian song can unnerve me in a few minutes; it seems to pluck at one's heartstrings, making the world a place of spirits where the impossible is about to happen.

There is surely similarity in spirit and construction between these Indian yaravis and the sobbing lyrics sung by the exiles of Babylon. They are intensely patriotic but deeply mournful. The memory of former wrongs has tinged their most popular songs with sadness. The young mother lulls her infant to sleep with verses the burden of which is sorrow and despair, and the love songs usually express the most hopeless grief.

Indians are always singing. Far out on the pampa, away from all human habitations, I have heard strange Kechua words crooned by little shepherd boys; harvesters, as they toil uphill with their immense loads of barley, invariably sing some plaintive old song; and families traveling along the dusty roads unite their voices in strange part harmonies to wailing melodies in minor key.

The World Race for the Rich South American Trade, by Charles Lyon Chandler, of the United States Consular Service, in the January number of the *World's Work*, is a timely study of the commercial relation between the United States and the great Republics of South America. Mr. Chandler has spent several years in various countries in Latin America and in dealing with the situation does not depend upon hearsay evidence. In the strenuous competition for South American trade the manufacturers and exporters of the United States are handicapped, according to Mr. Chandler, by lack of banking facilities, by meager sources of correct news, by inadequate knowledge of conditions, and by misdirected training of their trade representatives.

In considering the banking situation and in urging the modification of the law governing our national banks, Mr. Chandler cites some rather striking instances, which came under his personal observation, which seem to demonstrate the urgent necessity of extending the banking facilities if the exporting interests of the United States are to hope for their share of this growing trade. As an instance of the many handicaps under which the business man of the United States labors in his competition for trade Mr. Chandler says:

It is currently reported in South America that one chain of banking organizations sends copies of every invoice in its hands—and a good many of these invoices are from American customers—to the head office of the bank in one of the European capitals, for the information generally of exporters in that country. That country is one of America's largest competitors in the world's markets. Surely any American exporter can realize what an advantage it would be to him if he knew every price quoted by every French, English, German, and Italian firm to every South American buyer. This practice can hardly be condemned if we Yankees refuse to do our own banking



THE BRITISH BANK IN BUENOS AIRES—FOUNDED IN 18

This is one of the numerous foreign banks which have been founded in Buenos Aires since the First World War. Germany, France, Italy, Spain, and other European countries have established branches in Argentina, which, and the experience of other republics, is very materially increasing. Indeed, the great volume of Argentine foreign trade, especially in goods from the United States, has made it a most important factor in the World War.

Another argument as to the advisability of extending the financial interests of the United States in South America by Mr. Chandler is well worth quoting:

The more heavily we finance our foreign commerce with our own capital the sooner we become a creditor nation. The development of new countries is dependent upon creditor nations to finance their growth—to build railroads, canals, and wagon roads, to found factories and other industrial institutions, and, above all, to take up the issues of national and local bonds. There is no part of the world of which it would be more advantageous for us to become a creditor nation than Latin America. If we do this we will be an integral part of the growth of those countries, and, controlling the financial supplies furnished, we will secure a prior lien, as it were, on its future prosperity and on its business generally.

But England, France, Germany, and even Holland, have so far anticipated us in this respect as to make it problematical to many, at first sight, whether an American banking institution there would stand the strain of competition with those which have been for 50 years established in the field. This doubt, however, is quickly dissipated when the volume of our commerce in South America is considered. We have the commerce and that is the essential warrant for the existence of a bank. In one decade, from 1901 to 1911, our exports to South America increased 288 per cent. In that period the total trade of South America increased somewhat more than 150 per cent. To-day the Argentine Republic stands ninth among our customers; in 1900 she was fourteenth. Brazil stands thirteenth; 10 years ago she was sixteenth. * * *

We do not realize the price we pay foreign bankers on this immense trade between the two continents. It has been roughly estimated that the British banks alone have made more than \$80,000,000 from citizens of the United States in South America, and some authorities will tell you that this is too low an estimate. The toll is constant. It is like the old French seignorial river dues, that never ceased because the river never stopped flowing.

Mr. Chandler also takes up the need of young men who can best adapt themselves to new and unusual conditions to get the business for United States exporters; discusses the need for better news service; thoughtfully considers the need of immigration for South America; and finally gives a general survey of the effects of the opening of the Panama Canal on the great west coast of the continent. The article is one which should be generally distributed among those who are interested in the extension of the foreign commerce of the United States, for the whole situation is gone over in its clear and comprehensive survey of the subject, and that by one who speaks from actual personal observation and experience and has the ability to present the case forcibly and yet succinctly.

South American Pearl Fisheries, by LUCILE VERNON, is an interesting article on this important industry in the January number of the Bay View Magazine. A brief historical account of pearl fishing and

of the old methods employed on the Ceylon fisheries is given before the author enters into the history of the industry in America which, according to the article "begins with the discovery of the Western World by Columbus, who wrote glowing accounts to Queen Isabella of the beautiful necklaces and bracelets of pearls which he found the Indians of the Gulfs of Paria and Cariaco in Venezuela wearing, and which they so eagerly exchanged for broken bits of gaudily decorated Valencian plate. When Vasco Nuñez Balboa crossed the Isthmus of Panama in 1513, he found the Indians along the shores of the Gulf of St. Michael collecting pearls from oysters washed ashore during violent storms, as well as diving for them a short distance from the shore."

As to the industry in Venezuela the author writes:

In Venezuela the principal oyster beds are located around the island of Margarita, which word in Spanish means pearl, and at Cubagua, El Tucano, Gulfs of Paria and Coro, Porlamar, Maracapaná, and Macanao, so that this part of Venezuela became known to the early Spaniards as the "pearl coast." These fisheries were very rich when found by the Spaniards, but during the 50 years following their discovery were practically ruined by overfishing * * *. During the past century fishing has been revived from time to time, principally by European firms, and at the present time extensive operations are being carried on by a French firm holding a concession from the Venezuelan Government. Modern diving apparatus, as well as dredging, is employed, and some planting has been done. Most of the pearls taken from the waters in this vicinity are sent to Paris.

More than 400 sailing vessels and 2,000 men are constantly at work on the different beds along the Pearl coast and among the islands. Many of the difficulties encountered on the Pacific coast are not present here, principally that of the great tide variation, which here is not over 3 feet. Most of the divers work independently, securing a license at Margarita on the payment of a small sum. The yearly value of the product of the beds in the immediate vicinity of the island of Margarita is approximately \$600,000.

As to the fisheries of the Pacific coast the writer continues:

The principal fisheries of the Pacific are among the Islas del Rey, or Kings Islands, now known as the Pearl Islands, lying in the Gulf of Panama, about 50 miles from the city of Panama, and consisting of Rey Island, Pacheca, Pedro Gonzales, San Jose, and a number of smaller islands to the north. Other important fisheries are found among the islands of Coiba, Coibita, Jicarón, Secas, and Contreras, to the northwest and off the south coast of Chiriquí and Veraguas. Rich beds have at times been found along the shores of the Golfo Dulce, in Costa Rica, and around Punta Burica, in Panama. Some beds are worked along both the Pacific and Atlantic coasts of Colombia, and on the Pacific side down as far as Ecuador and Peru * * *.

The Costa Rica, Panama, and Colombia fisheries are famous for their black, green, and bluish tinted pearls, although many beautiful delicate pinks have been found. In March of last year there was found on the south coast of Chiriquí by the divers of the governor of Chiriquí, a pearl weighing 42 carats, about the size and shape of a partridge egg, greenish black at the base and becoming lighter toward the tapered end, which was of a light steel color. This gem was offered for sale in Panama, but was sold in Paris some months later for \$5,000.

The Spanish Church in New York City, "Our Lady of Hope," in *The Architectural Record* for January, is a somewhat technical description of this recent addition to the architectural beauties of New York, by L. R. McCabe. The author begins his description as follows:

Although it is 420 years since the discovery of America, 1912 finds New York with its first Spanish church.

The Church of Our Lady of Hope is situated on One hundred and fifty-sixth Street, near the Riverside Drive. It is within the spacious terrace (originally Audubon Park, crowned today by the Museums of the Hispanic and Numismatic Societies of America, the whole imposingly sentinelled, as it were, on the Broadway side at the corner of One hundred and fifty-sixth Street, by the building of the Geographical Society of America.

The Spanish church is fourth in this unique group of buildings of which the Hispanic Museum is the motif. When the One hundred and fifty-fifth Street corner has its building in architectural conformity with the Geographical Society's home there will be a monumental entrance from Broadway to this natural terrace overlooking the Hudson River * * *.

The church, in keeping with the other buildings, is an adapted style of the Italian renaissance. It is distinctly Roman in design * * *. Spain, like all Europe, was influenced by the early and later Italian renaissance. It retained, however, as does every nation, certain inherent qualities, which are best defined as feeling. It is this Spanish feeling that both architect and decorator have aimed to embody in Our Lady of Hope.

The church has a portico of four Ionic columns of terra cotta surmounted by an ornamental pediment and cross of the same material. Unlike the other buildings of the group, which are gray limestone, the church is built of buff brick with buff terra-cotta cornices and trim, crowned by an ornamental terra-cotta balustrade. The change in material relieves the eye and varies the color.

In the interior a vestibule leads to galleries and organ loft and into the body of the church, which is 80 feet deep, with a seating capacity of 400. The nave is formed by high round arches, crowned by a dome and a flat stained-glass skylight. This is the only New York church known to architect or decorator with nave illuminated by a flat skylight roof. The aisles on either side of the nave are broken by galleries, with balconies between the arches. These side aisles are lighted by six beautiful stained-glass memorial windows of American design and English execution.

When the exterior of the building was finished the interior of the church was turned over to Mr. Caryl Coleman for decoration, and the article continues:

This erudite authority on ecclesiastical art devised and executed a scheme of decoration which virtually converts Our Lady of Hope into a literal substantiation of a title given to the Mother of God in her litany—House of Gold.

Mr. Coleman, having been immensely impressed with the gold Church of the Annunciation in Genoa, had determined that some day he would make a gold church. Sufficient funds for so much of the precious metal being lacking, he set about for a substitute. This was accomplished by lining the entire wall space with aluminum, and by substituting oil for alcohol in the mixing of the glazes. Mr. Coleman



FIGURE. "The Architect's Last Task."

DECOATED BY SOROLLA. OLD LADY OF HOPE, NEW YORK CITY.

This is a reproduction of the original and picture of the Holy Virgin Mary, painted from wood, Spain, 16th century. The original is in the collection of the Museum of the Holy Virgin Mary, in the city of Madrid, Spain. The original is in the collection of the Museum of the Holy Virgin Mary, in the city of Madrid, Spain. The original is in the collection of the Museum of the Holy Virgin Mary, in the city of Madrid, Spain.



Courtesy of The Architectural Record

DETAIL THE ALTAR—"OUR LADY OF HOPE," NEW YORK CITY.

The door of the tabernacle of the High Altar is a gem of Christian symbolism and the goldsmith's art. It is made of bars of pure gold, repoussé and chased work, enriched with transparent enamel of sterling silver grading from a silver tone to a deep emerald. The key of this door is of gold and diamonds, once part of the personal jewelry of a well-known Spanish-American woman in whose memory it was made. On a side altar an acrothix and six candlesticks made of pure gold and transparent enamels. Excepting the body of the cross, which is a production from an Italian work of the fifteenth century, the decorator asserts that the whole is absolutely original in design, as are the four bronze memorial lamps in the nave. Not only candlesticks, crucifix, missals, stands, praying desks, consecration crosses, and holy water stoups, but the poor boxes harmonize with one another in period, style, and color, while the whole is in complete unison with the architectural character of the building, making "Our Lady of Hope" not only a thing of beauty, but an auditorium of Christian art well worth the study of architect, decorator, and builder, if not the "man in the street." From "The Spanish Church in New York City: Our Lady of Hope," in the January Architectural Record.

has obtained veritable gold effects that promise the wear of the real metal.

Mr. McCabe enters into details of the magnificent interior decorations somewhat too technical and too numerous for quotation. Anent the altars he writes:

The masterpiece of the gold church is the high altar. So successfully have architect and decorator collaborated that it is apparent to the untutored eye that the church was built to enshrine it.

"I am particularly proud of the altars," confessed Mr. Huntington—their beauty of color, the rich yellow Sienna marble carved as only Italy can carve, the proportions of their parts, their complete harmony with each other, and the architecture of the church make them the handsomest altars in New York.

The high altar is the gift of Mrs. Frederic C. Penfield, and the sanctuary floor of marble and mosaic and the Sienna marble communion rail and bronze door are all worked out on lines in well-studied harmony with it.

The two side altars, architectural and pictural complement of the high altar, are enriched by paintings from two of Spain's greatest living artists—Madrero and Sorolla. These side altars were the gifts of Mr. J. Pierpont Morgan and Mr. Frederic C. Penfield.

In the enrichment of the altars there is much to recall the days of Beni Cellinni, so scholarly the care, so finished the art with which minutest details are worked out.

The church, which has been blessed by Cardinal Farley, will be consecrated in the spring. In the words of the cardinal, "It is a gem of beauty and a triumph of Christian art."

Paraguay and the Paraguayans, by Elizabeth Fitzhugh, in the Bay View Magazine for January, is an article which embodies considerable information anent the least known country of South America. The writer likens the country to the Transvaal in its geographical location, size, industries, etc. The war of 1865-1870 is dealt with at some length, and the climate, products, and chief industry are treated in the following style:

The climate of Paraguay is very fine, and has been compared to that of the Canary Islands. It is warmer than any part of the United States, except perhaps Key West, for in that favored island the coconut palm will grow, which it will not do in Paraguay. It may be compared, then, to the climate of southern Florida, although Florida is not free from the blighting north winds which freeze the oranges on the trees, and in Paraguay no such calamity is known. The orange tree flourishes here in all its luxuriant beauty and fruitfulness, without danger of frost or need of irrigation; indeed, Paraguayan oranges are unexcelled, though scarcely any attention is paid to their cultivation, and grafted or budded trees are almost unknown * * *

The principal agricultural product of Paraguay is yerba maté, of which about 17,600,000 pounds are secured annually. Its name has really little significance, since yerba means "herb" and maté is dried gourd, out of which a liquid made out of the yerba is drunk. The Indians knew this plant and used it long before the invasion of the Spaniards, and they were found to be using a drink made of it * * *.

The yerba is gathered by the natives, who carry only a small ax and the simplest of provisions and sufficient water. His desire is to find the plant as near the camp as possible, so as to accomplish results immediately. The trees are of all sizes, from a shrub to the height of a full-grown orange tree, but the smaller the plant the better is

the tea made from its leaves. They grow irregularly, sometimes only a few to an acre, scattered throughout the general forest, or again they may be found in numerous clumps, from which a bounteous harvest is easily obtained.

When cutting begins it is continued until a mountain of branches is collected and piled up in the form of a haystack. The peons then fill their ponchos and hurry away with their loads * * *.

Then the smoking begins and lasts for about three days, the native skill, based to a great extent upon tradition, being trusted to decide the proper moment when the leaves have reached the exact degree of dryness for preparation into powder. Twenty-four hours is probably the minimum time for exposing the leaves to the heat. The drink made from the yerba is also called Paraguayan tea, and is almost as popular with the natives as coffee, indeed some preferring it to coffee.

The article closes with a complimentary description of the native Paraguayans and their clean and frugal lives and the general contentment and happiness of the farming classes.

Shifting the Calendar in South America, by William H. P. Walker, in the January 11 number of *Town and Country*, is an entertaining article which deals with the interesting features of South American travel. The writer touches briefly on the attractive cities of the West Indies usually visited by tourists and, before entering upon more detailed descriptions of the great metropolitan cities of South America, gives the reader the following glimpse of what he may expect to find on a tour of that continent:

But the main interest in these notes naturally centers in the great continent itself, the new South America. Travelers have begun to realize that some of the largest, most stately and beautiful cities in the world lie below the Equator. Artists supervise the municipal improvements. There are superb harbors, parks, statues, squares, avenues, residences, and public buildings. The women of social standing are noted for their beauty and are gowned in the latest Paris mode. Representative men, in their bearing and manners, are distinguished by a fine Old World courtesy. They have their universities, art galleries, libraries, and museums, to say nothing of the many notable churches and cathedrals. They are a pleasure-loving people, and have some of the very largest and handsomest theaters and opera houses in the world, in which renowned virtuosi appear. They read and know what is going on. What is probably the finest newspaper establishment anywhere is in South America. One of the greatest printing presses made in this country was recently shipped to the publishers. South America has its bankers, financiers, and millionaires. The continent teems with resources.

Rio de Janeiro, Sao Paulo, Montevideo, Buenos Aires, Santiago, Valparaiso all come in for a share of the author's attention, while five fine illustrations of Rio de Janeiro and its environment lend added interest to the article.

Chilean Nitrate as Fertilizer is the title of a comprehensive article in the January 2, 1913, issue of the *Journal of Commerce and Commercial Bulletin* (New York), which treats at considerable length and with much thoroughness of this most valuable of plant foods. According to the writer of this instructive article:

The most important and vitalizing element of plant food is available nitrogen. It is the one element of plant food which is requisite to every form of plant life, and it is also the one which is in almost every case deficient. There are few soils that can not be improved by increasing their supply of nitrogen. * * *

It follows, therefore, that the best practical form to furnish nitrogen to plants is one in which the process of nitration has already been completed and the fertilizer is immediately available as plant food. Nitrate of soda, which contains the nitrate necessary for the growth of plants, is not only the best but the most economical form of nitrogen fertilizer. * * *

The great superiority of nitrate of soda as a form of supplying nitrogen to the soil has been demonstrated by the most exhaustive and convincing experimental tests conducted in the fields of experiment stations of Europe and America. There has, therefore, arisen a widespread interest in the question of available supply of nitrate of soda, and some rumors have circulated that the supply might soon be exhausted, but investigations as to the conditions in Chile, where the nitrate beds are located, show that there is an available supply sufficient for the world's use for the next three or four centuries.

The only available source of supply for the nitrate of soda of commerce is located in Chile, between the eighteenth and twenty-seventh degrees south latitude, in the Provinces of Tarapaca and Antofagasta, between the coast range and the Andes. The principal deposits are found in a long narrow strip, about $2\frac{1}{2}$ miles in width, the deposits being from 14 to 40 miles from the Pacific Ocean. The center of the nitrate trade is Iquique.

The nitrate is not found in the nitrate beds in the form in which it comes to market, but in the form of a mineral, which is called "caliche." The region where this mineral is found is a rainless desert absolutely devoid of vegetation, and the beds exist at a height of from 3,000 to 5,000 feet above sea level. The raw nitrate, "caliche," is not known to exist anywhere else in the world in commercial quantities outside of the district of Chile above briefly indicated, and from there the world's demand, constantly increasing, is supplied through the ports of Iquique and Pisagua.

Many details of the astounding results of the use of nitrate of soda as a fertilizer are given, as well as the varied uses of the chemical in many manufacturing industries.

The completion of the Panama Canal—

Says the writer—

will put the United States, and especially the Gulf and Atlantic seaboard, in much better touch with the sources of supply of this wonderful fertilizing material, the demand for and use of which will without doubt greatly increase when the distance of the supply is cut in two by the canal.

Iron Ore Disappears from Eastern Markets, by C. J. Stark, in the January 9, 1913, issue of the *Iron Trade Review*, is a very comprehensive treatment of the iron industry of the island Republic. Few people have any conception of the wealth of Cuba's mineral resources, and save those directly interested in the importation of iron ore it may come as a surprise to learn that of the total imports by the United States of foreign ore in 1912 considerably over one-half came from Cuba. The estimated imports, by countries, for the year was—Cuba, 1,425,000 tons; Sweden, 330,000; Newfoundland, 170,000; Spain, 90,000; Canada, 90,000; and from all other countries, 40,000.

The following paragraph presents the situation very conservatively:

More and more, if it has not yet been fully demonstrated, the commanding importance of the iron-ore deposits of Cuba with relation to the eastern market is becoming emphasized. As the development of these properties expands year after year, the vast extent of the deposits is becoming more clearly proven. Their geographical position with respect to the eastern Pennsylvania furnace zone is among the most favorable of all the sources of supply outside the boundaries of the United States that feed that active center of pig-iron production. The difficulties and uncertainties that surround the carriage of iron ore great distances across the seas have on many occasions impressed themselves with practical weight upon eastern furnace men. Cuba's comparatively short distance from Baltimore and Philadelphia, and the fact that its situation is such that it enjoys a steady commerce with the leading eastern ports, greatly reduce the unfavorable features of ocean ore haul, in that ample shipping accommodations can normally be obtained.

Fair Play, A Weekly Review, published by the Braun-White Co., a New York corporation, announces that its management has passed into new hands and that it will not only be considerably enlarged, but its scope and influence will also be extended. Its columns will embrace a wide range of subjects, and a special feature will consist of an important section to be devoted exclusively to matters pertaining to the commercial relations of the United States with the Latin-American Republics. It is stated that—

this section will furnish information of the highest value and importance to the financial, mercantile, shipping, and industrial interests of the two Americas, and at the same time will deal with all matters relating to Pan Americanism, from the standpoint that the extension of commercial intercourse shall be accompanied by a corresponding growth of friendly feeling, based on respect for the rights of all nations irrespective of their power or weakness.

Mr. Leopold Grahame, a gentleman who has spent years in Latin America, and whose ability as a writer and publicist is widely known, will be editor in chief of the publication. His extensive acquaintance with the political and economic questions of the several American Republics will add much to the prestige of the Review in its chosen field. The BULLETIN welcomes it as a valued addition to its exchange list.

Among other interesting articles and sketches in the December 14 issue of *Fair Play* we note an entertaining and informative article by Mr. Grahame on Paraguay, in which are embodied some personal recollections of scenes and incidents of a visit to Asuncion some 10 years ago. In contrasting conditions of that period with those of the present, the writer takes occasion to note the vast improvement and progress made by the Republic, as follows:

As illustrating the progress made by the Republic, largely through foreign enterprise and capital, during the last few years, it may be said that the city of Asuncion is to-day, in many respects, a modern capital. Electric lighting has substituted the old oil and gas lamps. Impassable roads have been placed in perfect order. The old horse and steam tramways have been supplanted by a splendid up-to-date electric

tramway service. New hotels of the modern type have sprung up and are equipped with the latest appointments, while bathrooms, unknown in that city a few years ago, are now regarded as a necessity. The railway which at the time of my visit had its terminus to the San Bernadino Lake, has now been extended in one direction 154 miles to Pirapo, whence large quantities of the famous quebracho wood is exported, and in another to Encarnacion and Posadas, where a train ferry crosses the Parana into the Argentine Republic; and, by an alteration of grade to that of the Argentine railways, Paraguay is not only in direct railway communication with the neighboring countries, but the journey between Asuncion and Buenos Aires can now be performed in 36 hours, as against the old time of from 5½ to 6 days. During the last five years the cattle of the country, of which there are about 5,000,000 head, have been undergoing a refining process by the introduction of Argentine-bred Durham and Hereford bulls. Some of the largest producers of meat extracts have established factories in the country. Many thousands of tons of tobacco are exported annually to Germany, and considerable quantities of quebracho wood and the extract therefrom are shipped to the United States. Last year more than a hundred millions of oranges and large quantities of bananas were exported to Argentina and Uruguay, as were also large consignments of yerba maté (Paraguayan tea), which is used largely throughout South America in place of ordinary tea and coffee, being regarded as highly stimulating while much cheaper in cost.

La Vie Internationale, a monthly review published in Brussels, is the latest valuable addition to the Columbus Memorial Library collection of foreign magazines. This review, which treats of all subjects of international importance and interest, is the organ of the Union of International Associations (Union des Associations Internationales), organized in Brussels in 1910 during a world's congress in which 132 international organizations were represented. The scope of the work undertaken by the International Union is very broad and far-reaching in its effect, as it purposes to federate all international associations created within the last 50 years; to establish permanent relations and cooperation between them, to unify their methods and to coordinate their organization and program. One of the interesting features of the program of the International Union is the holding of a world's congress every three years, at least, in which all the different international societies will be represented. The international center has been established in Brussels, the headquarters of 87 international associations, in a building furnished by the Belgian Government, in which are located a great number of associations. In connection with the union an interesting international museum has been organized which occupies 16 rooms and includes more than 3,000 objects and pictures. The International Collective Library contains 75,000 volumes and the Universal Bibliographical Index comprises 11,000,000 cards classified by subjects and authors.

In addition to the *Vie Internationale*, the Union Internationale published the "Acts of the World's Congresses" (reports, discussions, and decisions), a "Handbook of International Life" (*Annuaire de la Vie Internationale*), a monograph giving a summary of all the facts of the permanent investigations on international life and organization and a

code of the decisions and resolutions of international congresses. This latter publication is under preparation.

The Union International is maintained by the voluntary subscriptions of the affiliated associations, by Government appropriations, and by private donations. It has been endowed by the Interparliamentary Union and by the Carnegie Endowment for International Peace.

A recent number of *La Vie International* contains a very interesting article on the International Institute of Agriculture, which was founded in Rome by an American citizen, Mr. David Lubin. It also publishes information in regard to the international expositions to be held in the near future and a calendar of the international congresses and gatherings which are scheduled for the next few years, and their places of meeting.

Uniformity in Consular Invoices, a most instructive and timely paper, was presented at the Fifth International Congress of Chambers of Commerce, at the recent meeting in Boston, by Mr. Wilbur J. Carr, Director of the United States Consular Service. In his opening statements Director Carr says:

The tendency everywhere is toward simplification of the methods by which relations are carried on between nations and individuals, toward economy of effort and of financial outlay, toward mutual understanding as a basis of political as well as commercial intercourse. Nations as well as individuals are steadily becoming more and more dependent upon one another, and through international unions and bureaus and in other ways are seeking to clear away one by one the causes of misunderstanding and of needless expense.

Other important subjects in regard to which there would seem to be great need of uniform requirements are census and commercial statistics, technical requirements of customs regulations, and consular invoices. Of the latter subjects the least difficult of adjustment upon a basis of substantial uniformity would seem to be that of consular invoices.

It is therefore in the United States, Mexico, Central and South America that the consular invoice is most generally required. With the exception of Argentina, Uruguay, and Costa Rica, all of the Latin American Republics, including Cuba, Haiti, and the Dominican Republic, require consular invoices for imports into their territory. Argentina requires a certificate of origin, however, which in many respects is the practical equivalent of the consular invoice. It is well known that the United States requires consular invoices.

Continuing, Mr. Carr relates numerous facts that are especially interesting to exporters and importers, or, rather, to those of our manufacturers who are reaching out to foreign markets and who are now becoming directly concerned with international intercourse. A carefully compiled table giving the regulations of many countries in regard to consular invoices and a proposed style of uniform international consular invoice add to the importance of Mr. Carr's paper, which has been well received by many leading commercial bodies of the world.

The BULLETIN takes advantage of this opportunity to give due credit to the Scientific American for the illustration of the Gatun locks, which appeared on page 1018 of our November issue, in the review of Mr. Edwards's article, "Our Canal," from the October Bay View Magazine.

It also wishes to state that since the legend was prepared for the picture, "The National Institute, Panama," on page 1015 of that same issue, Hon. Edwin Grant Dexter, former Commissioner of Education of Porto Rico, succeeded Dr. George Goetz, as head of the institute.

The National Memorial to Lincoln, in January Art and Progress, the organ of the American Federation of Arts, of Washington, contains much data relative to the progress that has been made on this long-delayed tribute to the memory of Lincoln. It will be recalled that in 1911 Congress appropriated \$2,000,000 for this memorial and at the same time appointed a committee to consider the subject. Potomac Park will probably be selected as the site, and the memorial, with its dozen magnificent and stately columns, will add still another costly edifice to the many that already adorn that section of the National Capital.

South and Central America, in Mining and Scientific Press, of San Francisco, for January 4, is the title of a brief review of mining progress in the southern countries. The article begins:

Interest among mining engineers and investors is turning rapidly toward Latin America. There is a growing conviction that in the great countries to the south are to be found the most important mineral deposits remaining to be mined. Arrangements are being made to give in the Mining and Scientific Press more space to Latin-American development.

El Tocado de Plumas de los Indigenas de America, by Isabel Krickberg in January Hojas Selectas, of Barcelona, is a very attractive article treating of the headdress of the Indians of the Americas. Splendidly colored halftones give the reader a better understanding of these peculiar adornments of the red man, whose dress and mode of life have ever been objects of interest. The article as well as the pictures throw much light upon the subject.

El Progreso de Puerto Rico, of San Juan, for December 14, contains as frontispiece a picture of the opening of the United States Congress. The same journal also carried pictures of Gov. Mann, of Virginia, Miss Eleanor Wilson, daughter of the President-elect, and as a new phase of woman suffrage another picture representing a Chinese girl in California casting a vote for President of the United States.

Las Piedras Preciosas del Uruguay, in Fray Mocho, of Buenos Aires, December 6, is the subject of a profusely illustrated article dealing with the precious stones of the Uruguayan Republic.

Los Ferrocarriles de Cuba (Railroads of Cuba), in *Cuba en Europa*, Barcelona, for December 15, is an interesting article, with several illustrations depicting the railroad progress of Cuba during recent years.

Los Fenicios en America, by David de Monjoy, in *Mercurio de Barcelona*, November 28, forms a page of interesting matter, the illustrations of which are rather uncommon. Dr. Narciso Alberti, of the Dominican Republic, who is an authority on antiquities, has discovered some important facts which are brought out in the article.

Cuba: su Literatura Actual, el Ambiente, by Bernardo G. Barros, in the December number of *La Revista de America*, Paris, covers a dozen pages. Aside from the well written article, the editor's footnote describes Señor Barros as a brilliant young writer and novelist of whom Cuba should be justly proud.

Maniobras Militares en Bolivia, is the title of an article in *Caras y Caretas*, of Buenos Aires, for November 16. Nine illustrations add interest to the context and indicate the degree of progress that the military arm of Bolivia has attained—a progress that insures peace and tranquillity which this interior Republic has enjoyed for a number of years. The maneuvers were reviewed by President Villazon, whose address to the soldiers and citizens breathed of progress and advancement along all lines of commercial and industrial activity.

El Cultivo del Cacao, La Alfalfa, La Raza de Alpaca Suri, are interesting continued articles appearing in November issue of *La Riqueza Agricola*, of Lima. Numerous other timely topics are discussed in this magazine, which is doing important work in advancing Peruvian agriculture in its varied branches.

Revista da Semana, of Rio de Janeiro, December 7, devotes a dozen pages to the sad duty of portraying the funeral ceremonies of the wife of the President of the Republic. The untimely death of the first lady of Brazil on November 30 last cast a gloom over the country. Madame Orsina da Fonseca had endeared herself to the Brazilian people by her many noble qualities, and the *Revista* illustrates the last sad rites paid to her memory.

Revue Hispanique, the organ of the Hispanic Society of America, New York, volume 25, number 67, contains a full page reproduction of a painting of Cervantes, which, together with a well-written article, forms an interesting contribution to the biography of this famous man of letters.

Coffee is Being Exported to America at Lower Rates than to Europe, by Lorenzo Daniels, in the December Tea and Coffee Trade Journal, New York, is an interesting address which was delivered before the

National Coffee Roasters' Association of the United States. Mr. Daniels makes a strong plea for the North American business men to visit South America, and points out the new facilities that are now at the disposition of the American public.

Investment Opportunities in the Continent of America is the subject of several pages of well-written matter appearing in the *Financial Review of Reviews*, of London, for January. The writer, who signs himself "The Financial Critic," begins his article as follows:

In no part of the inhabited globe has commerce and industry been developed so rapidly, during the last few years, as on the two American continents. A study of North and South American commercial and industrial records reveals quite an extraordinary expansion in all directions.

San José de Cúcuta is the title of a descriptive article appearing in *Revista Nacional de Colombia*, of Bogota, for November 23. This city, better known as Cúcuta, is the capital of the Department of the same name and was founded in 1733. Ten fine illustrations give the reader a fair idea of the progress of the city, which has been marked by many improvements during recent years. The same journal also contains an obituary of one of Colombia's most distinguished and honored citizens, Don Roberto Herrera Restrepo, whose recent death was widely mourned.

Mercurio, of Barcelona, for November 14, contains cuts and short sketches of the new presidents of Cuba and the United States, respectively. Another article of timely interest bore the title: *La Caja de Crédito Hipotecario en Chile* (mortgage bank), which contained much information relative to banks and banking in the Chilean Republic.

Archives de Oftalmologia Hispano-Americanos, of Barcelona, November, contains numerous scientific articles and notes by well-known physicians and eye specialists.

La Vuelta del Mundo por Dos Centavos, in January *Cosmos*, of Mexico City, is the title of a descriptive article on the postal system of Mexico. It begins by tracing a letter for a short distance from the Capital to a suburban town, noting the various stages of its journey from writer to receiver. Then the letter is traced on longer travels; and many illustrations show the modern and rapid facilities for handling the mails of the Republic.

The Quipas; An Invention of the Incas, is the subject of a short article in the November *Inca Chronicle* of La Fundicion, Peru. The Quipas, according to the story, is composed of a series of ropes or strings about a yard long; all of these are attached to a staff or beam, and by a series of knots made on the cords the Inca could reckon days, months and years, the number of people in a given town, good and bad persons, brave and cowardly, and in fact record information and history as we do by means of books and written language.

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO FEBRUARY 10, 1913.¹

Title.	Date.	Author.
ARGENTINA.		
Copy of "Bulletin of Public Works"	1912. Dec. 7	Albert G. Ebert, vice consu general, Buenos Aires.
No market for paper towels	Dec. 10	Robert T. Crane, consul Rosario.
Fair market for field seeds	..do.	Do.
Rubber material; sewing machines; pool and billiard tables; vacuum cleaners; split steel pulleys; scissors and shears; ex- plosives.	Dec. 14	Do.
Foreign commerce, nine months of 1912	Dec. 17	R. M. Bartleman, consul gen- eral, Buenos Aires.
Inclosing "Review of the River Plate" of Dec. 13, 1912	..do.	Do.
News and trade paper, "El Magazine"	Dec. 20	Do.
BRAZIL.		
Proposed school buildings and play grounds for Rio de Janeiro...	Dec. 27	Albro L. Burnell, vice con- sul, Rio de Janeiro.
New Italian-Brazilian steamship service	1913. Jan. 7	D. R. Birch, consul, Bahia.
CHILE.		
Cigar and leaf tobacco imports 1911—duty	1912. Dec. 9	Alfred A. Winslow, consu Valparaiso.
Trade and agricultural notes	Dec. 10	Do.
Wages of wool shearers and sheep ranch laborers	Dec. 13	Charles L. Latham, consu Punta Arenas.
Woodworking machinery (growing demand)	Dec. 28	Alfred A. Winslow, consul Valparaiso.
Conditions in Chile at beginning of 1913	1913. Jan. 7	Do.
Industrial and commercial notes	..do.	Do.
DOMINICAN REPUBLIC.		
Exports of honey	Jan. 9	C. M. Hathaway consu Puerto Plata.
Canned food products	Jan. 18	Do.
Caustic soda and soda ash	Jan. 21	Do.
GUATEMALA.		
Sandpaper and emery cloth—duty	1912. Dec. 31	Geo. A. Bucklin, consul gen- eral, Guatemala, City.
HAITI.		
Automobiles in Haiti	1913. Jan. 9	J. B. Ferres, consul, Port au Prince.
List of dealers in hardware in Port au Prince	Jan. 20	Do.
HONDURAS.		
Products and commerce	1912. Dec. 28	David J. D. Myers, consu Puerto Cortes.
Oils, fats, and greases—no refiners nor manufacturers	..do.	Do.
MEXICO.		
Open market for pearl buyers	Dec. 24	Lucian N. Sullivan, consu La Paz.
Candies and confectionery—all homemade	Dec. 30	M. B. Kirk, consul, Man- zanilla.
Roads	Dec. 31	Warren W. Rich, vice consul, Salina Cruz.
No market for multigraph machines in Salina Cruz	1913. Jan. 2	Do.
Electric and ice making plant combined with a refrigerating and meat-packing establishment at Sufragio	Jan. 4	Wm. E. Alger, consul, Ma- zanilla.
Cost of living	Jan. 8	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this institution.

Reports received up to February 10, 1913—Continued.

Title.	Date.	Author.
MEXICO—continued.		
Paints—prices.....	1913. Jan. 10	Lucian N. Sullivan, consul, La Paz.
Dealers in general merchandise.....	Jan. 11	Thos. W. Bowman, consul, Nogales.
Mining and cattle raising.....	Jan. 14	Do.
Shoes.....	Jan. 17	Do.
Gasoline lighting system, etc.....	do.	Warren W. Rich, vice consul, Salina Cruz.
Commerce and industries, Mazatlan.....	Jan. 18	Wm. E. Alger, consul, Ma- zatlan.
Silks and silk and cotton fabrics—little market.....	Jan. 22	Warren W. Rich, vice consul Salina Cruz.
Industrial notes from North Sonora.....	Jan. 24	Frederich Simpich, vice con- sul, Nogales.
Commerce and industries.....	do.	Philip E. Holland, consul, Saltillo.
Railway building in Mexico.....	Jan. 25	Arnold Shanklin, consul gen- eral, Mexico City.
Paints—prices.....	Jan. 27	Clarence A. Miller, consul, Tampico.
PARAGUAY.		
Condensed milk—duty.....	1912. Dec. 1	Cornelius Ferris, jr., consul, Asuncion.
Manifolding machines.....	Dec. 18	Do.
Hops—imports.....	Dec. 20	Do.
PERU.		
Trade notes from the Peruvian Sierra—notes taken during recent trip over that section.	1913. Jan. 2	Luther K. Zabriskie, deputy consul, Callao.
URUGUAY.		
Central Uruguay Railway earnings.....	1912. Oct. 29	F. W. Goding, consul, Mon- tevideo.
Regulations for dispatch of baggage.....	Nov. 1	Do.
Era of new roads in Uruguay; factory for manufacture of sheep- tack remedy, "Golden Fleecce".....	Nov. 12	Do.
Exportations of Uruguay industries.....	Nov. 13	Do.
Market for American molasses.....	Nov. 15	Do.
State of Uruguay banking in October, 1912.....	do.	Do.
Industrial exposition.....	Nov. 16	Do.
Regulations for transportation of vegetables.....	Nov. 21	Do.
Uruguay notes: New steamship service; maritime police regula- tions of port of Montevideo; new national register for coasting and fishing vessels; meat industry on the River Plata.	Nov. 22	Do.
New pure-food ordinance for Montevideo.....	do.	Do.
Project for revision of Uruguay tariff V.....	Nov. 29	Do.
New foundry in Uruguay.....	Dec. 2	Do.
Railway development.....	do.	Do.
Law creating division of live stock and agriculture inspection.....	1909.	Do.
VENEZUELA.		
Women's clothing—duty.....	Dec. 18	T. W. Veesthede, consul, La Guaira.
1913.		
Duty on liquid veneer, lubricating oil, and emery grinders.....	Jan. 7	Do.
Gold and silver plated ware.....	do.	Do.
New customs classification.....	Jan. 10	Do.
Cart and carriage wheels.....	Jan. 13	Do.
New customs classifications—covers for merchandise.....	do.	Do.



ARGENTINE REPUBLIC

The Caravelas COOPERATIVE SOCIETY has been organized for the benefit of the fruit growers on the Delta of the River Plate. One of the objects of the society is to supply fruit and vegetables to the local free fairs. Other organizations of the same kind are to be formed along the Parana River and its tributaries.—A recent report of the minister of public works of the Argentine Government to the federal congress shows that 3,163 kilometers of new RAILWAYS were opened to public service in 1911, making the total extent of railways in operation in the Republic at the beginning of 1912, 31,749 kilometers. A large increase of 1,296 kilometers in the length of the State railways was noted. In 1911 the railways of the country transported 67,357,432 passengers and 32,338,263 tons of merchandise. The estimated capital invested in Argentine railways in 1911 was 1,084,600,000 gold pesos, and the profits on same in 1911 were 44,832,980 gold pesos (Argentine gold peso = \$0.965 United States currency).—In 1880 the production of SUGAR, in round numbers, in the Argentine Republic was 10,000 tons; in 1891, 46,300 tons; in 1892, 58,000 tons; in 1894, 85,000 tons; in 1896, 163,000 tons; in 1910, 180,000 tons; and in 1912, 240,000 tons. In 1888 the area of land planted in sugar cane was 21,062 hectares; in 1895, 61,273; and in 1912, 72,060 hectares (hectare = about $2\frac{1}{2}$ acres). The average production of cane is 30 tons per hectare. The Province of Tucuman has 30 sugar factories, and there are 13 of these factories in the Provinces of Jujuy, Santiago del Estero, Santa Fe, Corrientes, and Salta, and the Territories of Formosa and Chaco. The total cost of cultivating, harvesting, marketing, etc., is 200 pesos, national currency (paper peso—about 44 cents United States currency), per hectare, and the gross returns 300 pesos per hectare. It is estimated that there are 47,000,000 pesos, national currency, invested in the sugar industry in the Province of Tucuman. From 1907 to 1911 the imports of sugar into the Argentine Republic are estimated at 157,000 tons.—According to a report of the minister of public works of the Argentine Republic there will be completed by the close of 1913 the following improvements in connection with the water supply of the city of Buenos Aires: An intake tower, a subfluvial tunnel, two filters, two settling deposits, elevating and impelling pumps, impulsion piping, and the reserve gravitation reservoir at Caballito.—The department of public instruction of the Argentine Government has contracted with a German firm for the installation of an ELECTRIC POWER HOUSE for the industrial school of the nation. The plant will cost, approximately, 80,000 pesos, paper, and will be used

for the purpose of imparting theoretical and practical instruction to pupils engaged in the study of the industrial and mechanical arts. — The adaptability of large tracts of land in the Chaco and Corrientes Territories of the Argentine Republic to the **CULTIVATION OF COTTON** has been satisfactorily demonstrated by experiments carried on at the national experimental farm annexed to the school of industrial cultivation of the Benitez colony in Northern Argentina. The opinion of North American experts on the production of cotton in Northern Argentina is that the uplands of the Parana and Paraguay Rivers, among which are the lands of the Chaco and Corrientes regions, are the only places known in the world at the present time capable of competing with the United States of North America in the raising of raw cotton. German and Spanish experts who recently examined cotton consigned to them from these districts pronounced the quality of fiber, color, and desirability in every respect as first class. In 1912 Argentine cotton brought in Bremen \$170 gold per ton. The chief agricultural engineer of the Benitez farm colony, where extensive experiments in the cultivation of cotton have been made, describes the cotton lands of the Chaco and Corrientes districts as very fertile, the soil being similar in composition and character to the celebrated soil of the cotton lands of the lower Mississippi Valley, responding liberally to cultivation. The yield on some of the Chaco lands is as high as from two to three tons per hectare. Land devoted to the growing of cotton in the Chaco Territory has increased from about 500 hectares in 1907 to more than 2,000 hectares in 1912, and plans have been developed looking to the planting of a large acreage in this fiber in 1913. The Argentine Government has distributed sea-island cotton seed to numerous planters in the northern part of the Republic, and it is confidently estimated that the cotton yield in 1913 will be greatly in excess of that of any previous year.—The public works committee of the Deputies has approved the project presented by Deputy Frers for **BUILDING RAILWAYS** in the Territories. This provides that tenders are to be called for the work. The two lines in the south, one from San Antonio to Nahuel Huapi and the other from Puerto Deseado joining up with the same line, are to enter into one specification, and the two lines in the north from Barranqueros to the Central Northern line and from Formosa to Embarcacion will form two separate specifications. The portions of the above railways already constructed are to be purchased by the company obtaining the tender, and land grants are to be made to the respective companies carrying out the work. If this project goes through and the Government is able to find companies willing to undertake the work it will mean that the National Territories will have a much better chance of being opened up than if the work is continued by the Government. The important land grants which

will accompany each contract will be the means of bringing about colonization on a fairly large scale, and this is most important to the country, for without colonization the railways would be of very little service, while with colonization the land will be developed.—The public works committee of Buenos Aires city council has reported favorably on the project for construction of SUBWAYS to carry tubes for the pneumatic postal service, water mains for street service, electric light, telephone, and telegraph cables, in the radius comprised by Calles Belgrano, Entre Rios, Callao, Paseo Colon, and Paseo de Julio. Tenders are to be called for the works, and the municipality is to issue bonds up to \$20,000,000 national money, bearing 5 per cent interest and 1 per cent amortization. The interest on these bonds is to be met by the revenue to be obtained from those companies making use of the tunnels.



BOLIVIA

The President of Bolivia has been authorized by the Federal Congress to contract with the Electric Light & Power Co. of Cochabamba for the extension of the Vinto to Arani RAILWAY as far as the city of Totora, the construction of a TRAMWAY from Cochabamba to Sacaba, and the prolongation of the Quillacollo-Vinto road to the town of Sipesipe. The capital to be invested in these enterprises must not exceed £450,000, the Government guaranteeing 5 per cent interest annually and 2 per cent annual amortization on the actual capital invested. The gauge of all the lines is to be made the same as that of the railway from Cochabamba to Santa Cruz. The materials for the construction and operation of these roads are to be admitted free of duty for a period of 25 years.—An appropriation of 20,000 bolivianos has been made by the Congress of Bolivia for the purpose of establishing DEPARTMENTAL SANITARY OFFICES in the cities of Cochabamba, Potosi, Oruro, and La Paz.—A BRIDGE is to be constructed over the Colcha River in the Province of Arque. The Congress of Bolivia has appropriated 5,000 bolivianos for this purpose.—A law promulgated December 4, 1912, provides that the proceeds of the customhouse at Chucllas be expended in the conservation and repair of the public highways from Yungas to Totora and of the road from Arepuchto to Chimore.—A recent issue of the newspaper entitled "La Idea," of Tarija, contains 31 petitions concerning the purchase of LANDS in that vicinity, aggregating an area of 992,500 hectares. Most of the applicants for the purchase of these lands were foreigners, among whom were a number of North Americans.—The "Olla de Oro" gold mine in the south Yungas

district of Bolivia has ordered another mill for its new "Incaora" mine in the Province of Larecaja, about 150 miles from the "Olla de Oro." The mill will have a capacity for treating 50 tons of ore a day and has been ordered from the United States. The mine is a ledge mine.—The law of October 25, 1900, fixed the minimum **VALUE OF THE BOLIVIANO** received by the railways of Bolivia in payment of freight and passenger charges at 18d. This law has been modified so that when the international rate of exchange is greater than 18d. the freight and passenger tariffs in bolivianos will be reduced in the same proportion as the increase of the rate of exchange over 18d.—The Bolivian Congress has authorized the President of the Republic of Bolivia to increase, from January 1, 1913, by one boliviano per tin the duty paid by the concessionaire on imports of **ALCOHOLS** and **aguardientes**.—In the budget of the Bolivian Government for 1913 an appropriation of 50,000 bolivianos is made for the immediate survey and marking by corner stones of the **BOUNDARY LINES** between the Departments of Chuquisaca, Santa Cruz, and Tarija. This survey will settle the question as to whether the town of Ivo is in the Department of Chuquisaca or the adjoining Department.—A tax of 10 centavos per each 46 kilos of **LIME AND GYPSUM** produced in the Department of Cochabamba has been levied by the Federal Congress. The proceeds of the tax will be paid into the treasury of that department.—The village of Sacaba has presented Señor Elidoro Villazon, President of the Republic, with a **GOLD MEDAL** in testimony of its gratitude for his gift of a supply of potable water piped into the village by order of the Chief Executive.—The **PROVINCE OF CLIZA** has been formed, under a recent act of the Bolivian Congress, out of the second section of the Province of Tarata of the Department of Cochabamba. The capital of the new Province is Cliza, and the Province is composed of the Cantons of Cliza, Toco, and Tolota.—The city of Cochabamba has been authorized by the Federal Congress to negotiate a loan for 200,000 bolivianos secured by a mortgage on the public market and city hall. The proceeds of the loan are to be used in the construction of **MARKET BUILDINGS**.



The bill recently introduced in the Federal Camara granting a credit of 500,000 milreis (milreis equals about 33 cents United States currency) to purchase the library and **OBJECTS OF ART** belonging to the late Baron do Rio Branco, and to defray the expenses of his funeral was promptly approved, all formal delays usual in such cases

being dispensed with in deference to the memory of the illustrious deceased.—The Anti-Drought Department of the Government is actively continuing the construction of DAMS to relieve the situation in the interior of Ceara and other northern States of Brazil where the inhabitants suffer from the periodical droughts. The department's second section in Natal has begun the construction of a reservoir in Caraubas, Rio Grande do Norte, which is to have a capacity of 11,110,000 cubic meters. Dams are also to be constructed at Curaca, Joazeiro; Riacho do Sangue, Ceara; Pao dos Ferros, Rio Grande; Apody, Rio Grande; and Monte Santo, Bahia.—The minister of public works was authorized by a decree of December 18 to open a credit of 100:000\$000 (about \$33,330 United States currency) for the purpose of initiating the work of DREDGING the Sao Francisco River from its mouth to the town of Piranhas.—A bill was recently introduced in the Sao Paulo Congress and favorably reported by the Committees of Justice and Finance and recommended by them for the approval of the Government, which provides for the employment of CONVICT LABOR in the construction of roads for wheeled traffic and combines with the system the institution of conditional release and the President's prerogative of granting free pardons in such a way as to hold out to the prisoners inducements to reform.—On the proposal of the State Government of Sao Paulo it has been determined to erect a MONUMENT in memory of the Emperor Dom Pedro I and of the patriots who assisted him in founding the Brazilian nation. It is to be placed on the hill of Ypiranga, on which the political independence of the country was first proclaimed.—The President of the State of Sao Paulo has signed a decree authorizing the Secretary of Agriculture and Public Works to open a special credit of Rs. 1,000:000\$000 (about \$333,000 United States currency) to meet expenses connected with the building of the NEW PENITENTIARY.—A bill authorizing the establishment of SCHOOLS of practical plowing and stations for the experimental culture of tobacco, cotton, and cereals at Angatuba, Porto Feliz, Capao Bonito do Paranapanema, Guarehy, and Sarapuhy, was approved December 17, 1912.—A bill empowering the State government of Sao Paulo to expend the sum of Rs. 2,423:000\$ (about \$807,660 United States currency) on SUPPLEMENTARY WORKS to buildings already constructed for the school groups of various municipalities of the State, and other operations, passed its third reading in the State Congress at its last session.—The President of the State of Sao Paulo has signed a decree authorizing the Secretary of Agriculture and Public Works to open a special credit of Rs. 122:000\$000 (about \$40,660) to meet expenses connected with the extension of the FUNILENSE RAILWAY to the banks of the River Mogy-guassu.—The finance committee has authorized the Govern-

ment to concede, without onus to the treasury, to Dr. Raul Ribeiro da Silva and others the privilege of constructing and exploiting an electric traction RAILWAY to connect the cities of Rio de Janeiro and Santos.—According to the Brazilian Review of December 24, a telegram from London states that despite the general depression in other directions, the SHARES of the Sao Paulo Railway Co. have risen $6\frac{1}{2}$ points, being quoted at 240.—It is stated that the contract of SALE of the Bahia-Minas Railway by the State of Minas to the Federal Government for 12,000 contos (about \$3,996,000 United States currency) was signed at the treasury offices in Rio de Janeiro on December 7, 1912.—A paragraph in the Brazilian Review of December 17, 1912, states that "the steamship *Euclid* of the Lamport & Holt Line arrived at New Orleans, United States of America, on October 31 from Santos and Rio de Janeiro, Brazil, on her maiden trip with the largest cargo of COFFEE ever taken out of Brazil, comprising 126,000 sacks. It is also the largest cargo by 6,000 sacks ever brought to New Orleans or any other United States port. The cargo weighed approximately 8,612 tons."—According to statements made by its promoters, the proposed PARAGUAY NORTH-EASTERN RAILWAY, for which a concession was granted in 1911, is to run from Asuncion northeasterly to the Paraguayan-Brazilian frontier, where it will cross the Parana River at 24° south latitude. From that point it is proposed to connect with the transcontinental Brazilian line which connects with the main Brazilian system at Itapetininga. The concessionaire syndicate represents \$9,733,000 capital.—An office and INFORMATION BUREAU of Brazil has been opened by Dr. Eugenio Dahne at 1253 Jones Street, San Francisco, Cal., under the instructions of the minister of agriculture, industry, and commerce of Brazil. The object of the bureau is to promote better friendly and commercial relations between California and Brazil, and also to extend Brazilian trade with the Orient now that the opening of the Panama Canal will soon permit direct communication.—The Camara Municipal of Sao Paulo recently held a meeting to consider the question of ways and means in relation to the huge schemes of CITY IMPROVEMENTS and embellishments which now engage its attention. There is no doubt that Sao Paulo is now too small for its population. The streets are thronged to excess, and it has become absolutely necessary to undertake the work of widening them. There are not houses enough for the inhabitants, though building has long been going on at the rate of 3,000 or 4,000 houses a year. During periods of drought the water supply is short and the inhabitants are put on short allowance. The meeting drew up a bill asking authority to borrow \$15,000,000, which loan, it is understood, will be guaranteed by the State government, to whose consideration the project has been submitted.

CHILE

A survey has been made of a RAILWAY 270 kilometers long between Arica and Zapiga.—The cost of construction of the San Bernardo to Puente Alto RAILWAY is estimated at 335,845 pesos, paper (paper peso = \$0.223), and 140,628 pesos, gold (gold peso = \$0.365 U. S. currency).—It is reported that £300,000 is to be spent in strengthening and protection work on the Trans-Andean RAILWAY in the mountainous section via Juncal.—The Mixed Railway Commission has been given 20,000 pesos with which to make a preliminary study of a route of a coast line RAILWAY between Punta Colorada on the Longitudinal Railway and Caleta del Apollillado, with a branch to the Higuera mineral zone.—Federico Blanc has contracted with the municipal authorities of Traiguén to supply that town with POTABLE WATER.—The cities of Cabildo and Castro have decided to install WATERWORKS in the near future. Bids have been called for and active steps are being taken to secure an abundant supply of potable water.—The DAIRY INTERESTS of Chile are seriously studying the question of the type of cow best suited to the requirements in this country. With this in view, the Sociedad Agrícola del Sur de Chile sent a representative to Argentina, who purchased 175 Holstein heifers for the different dairy farms of this society. Dairy farming is making rapid strides in the south of Chile. The Chilean Government has established agencies in different parts of the agricultural sections of the country for the distribution of NITRATE to the farmers, with the result that its use as a fertilizer has increased from 1,551,000 pounds in 1908 to 7,694,400 pounds in 1911, and with the best of results. To aid in this work the Government appropriates \$7,000 or \$8,000 gold annually.—Since December 1, 1912, a TRI-WEEKLY RAILWAY SERVICE has been in operation between Valparaíso and Buenos Aires, the trains leaving the former place at 6 p. m. on Mondays, Wednesdays, and Saturdays, and arriving at Buenos Aires at 7.10 p. m. on Wednesdays, Fridays, and Mondays.—In 1911 the INSURANCE COMPANIES at Santiago earned 8,000,000 pesos. The estimated earnings for 1912 are 12,000,000 pesos. The Spanish Bank of the River Plate at Buenos Aires is to establish a branch at Valparaíso.—Bids were opened on January 15 last for construction work and IMPROVEMENTS in the city of Valparaíso amounting to 3,000,000 pesos.—An Executive decree has been issued modifying the customs regulations concerning the receipt and dispatch of merchandise at the customhouse at Valparaíso. The new rules greatly

facilitate the loading and unloading of vessels and have been put in force for the purpose of preventing unnecessary delays in these operations. — Congress has modified the law enacted for the encouragement of the building of SANITARY HABITATIONS for workmen, and has authorized the President of the Republic to grant to corporations engaged in this work a State guaranty of 6 per cent interest annually for a period of twenty years on the capital invested in the class of buildings referred to provided the investment is not less than 500,000 pesos. — The Government of Chile has granted permission for the free entry of material and supplies to the value of 20,000 gold pesos to be used in the construction and installation of the BRITISH HOSPITAL. — A law has been passed by Congress prohibiting the free acquisition of MINES or mining claims by private persons within 500 meters of either side of the right of way of railway lines. — A MAP of the Vallenar y Freirina mining zone is being made by the department of mines of Chile. This map forms one of a series intended to show the complete mining resources of the country. — Authority has been granted to Compton & Co. to complete a private STEAM RAILWAY from Loncoche to Villarica, with the right to extend same to Cararehue via Pucon. — The sum of 105,000 pesos has been placed at the disposal of the Department of Railways of the Government of Chile to expend in a preliminary survey of a TRANS-ANDEAN RAILWAY between parallels 34 and 37 in the southern zone of the Republic. — Construction work on the Alcones to Pichilemu RAILWAY is being actively pushed forward, 146,500 pesos having been recently made available for continuing work on this line.



A new STEAMSHIP COMPANY has been organized to operate two steamers between Cartagena and Quibdo. One of these for the coastwise trade will go as far as Uraba, and the other vessel will navigate the Atrato River. — From the first of the present year the salary of the PRESIDENT of the Republic of Colombia is \$1,500 per month, and that of the judges of the supreme court \$400 per month each. — The Telefunken WIRELESS Telegraph Co. has offered to install a wireless station for the Government at San Andres, capital of the archipelago of San Andres and Providencia, for £4,000. — The President of the Republic has approved a 30-year contract made between the Minister of Public Works and A. M. Osorio for the exploitation of PETROLEUM AND ASPHALT

deposits in the municipalities of Victoria and San Augustin, Department of Caldas.— The municipal council of Manizales is negotiating for a LOAN of \$100,000 for the construction of public works at Medellin.— The department of public works has contracted with Gonzalo Mejia for the operation of HYDROPLANES on the Magdalena River for passenger and freight transportation, especially the former. The service is to be commenced within a year. It is estimated that in these vessels the trip can be made from Barranquilla to Girardot in five days.— The board of directors of the SABANA RAILWAY has ordered from abroad 6 first-class passenger cars fitted up with all modern conveniences, 1 special baggage car, 20 steel freight cars of a capacity of 20 tons each, 6 platform cars, and 2 locomotives weighing 53 tons each. The board has also had a large storehouse constructed in Bogota, and has ordered improvements made in the platforms of the railway station at the Federal capital.— The corner stone of the UNIVERSITY OF MAGDALENA has been laid at Santa Marta. This university promises to be one of the leading educational institutions of the Republic.— The Commercial Bank of Barranquilla has loaned the municipality of that city \$30,000 for PUBLIC IMPROVEMENTS.— The superintendent of the Antioquia Railway has been authorized to order from the United States the STEEL FRAMEWORK necessary to use in increasing the size of the warehouse at Puerto Berrio, and for such bridges as may be required on the line as far as Bello.— Jose Fuentes, an experienced aviator, has petitioned the Government of Colombia for permission to establish an AVIATION SCHOOL in Bogota.— The *Santander*, a rapid steamer of the Pineda Lopez Navigation Co., recently made the TRIP from La Dorada to Barranquilla in 50 hours. The Federal Government has planned to establish POSTAL SCHOOLS for the purpose of giving instruction in that branch of the public service.— A CAPSTAN, with all of its accessories, has been ordered by the Government of Colombia for use at the Nemocon salt mines. By the use of this apparatus 1,000 arrobas of salt can be brought up from a depth of 80 meters in 10 hours.— The department of public works has arranged with the railway companies of the Republic to establish a JOINT TICKET OFFICE and bureau of information in Bogota.— The VETA MINING CO., recently organized in Bogota to exploit gold properties in the north of Ibague, near the headwaters of La China River in the Central Cordillera, has 18 mining claims. Samples from some of these claims have been assayed, and those taken from the Monserrate vein are said to average 6.1 ounces of gold per ton, while the samples from the Guadalupe vein ran 4.6 ounces of gold per ton. None of the assays, according to reports, from any of the veins ran lower than \$12 per ton. A cyanide plant is being installed with a capacity for treating 30 tons of ore daily.

COSTA RICA

The FIFTH CENTRAL AMERICAN PEACE CONFERENCE, which met in San Jose on January 1, 1913, was composed of the following delegates: Dr. Faustino Viquez, delegate of Costa Rica, president of the conference; Dr. Manuel Arroyo, delegate of Guatemala; Gen. Saturino Medal, delegate of Honduras; Dr. Maximo H. Zepeda, delegate of Nicaragua; and Dr. Rafael Mesa, delegate of Salvador. Some of the principal topics discussed in the conference related to the unification of the consular service; reform of the postal, telegraph, and telephone services; the establishment of a Central American Department of Agriculture; and laws concerning citizenship. Prior conferences have been held in Washington, Guatemala, Tegucigalpa, San Salvador, and Managua. The BUDGET of the city of Limon for the fiscal year 1912-13 amounts to 65,820 colones (colon = \$0.465 United States currency). A weekly COASTWISE freight and passenger service has been established by order of the Government of Costa Rica between Port Limon, Cahuita, Fortuguero, Colorado, and other important trading points. A contract with Otorola & Araya for the construction of the bastions of the BRIDGE over the Porrosati River at the San Juan de Santa Barbara Pass has been approved by the Costa Rican Government. The work will cost 2,560 colones. — An ELECTRIC light plant has been installed at Mora in the municipality of the canton of the same name. The city of Colon has received bids for the construction of two reenforced-cement buildings, one to be used for police barracks and the other for a jail. — A leading newspaper of San Jose advocates the use of Coco Island as a penal settlement, that island being more appropriate for this purpose than the present penal settlement established at San Lucas. — Sr. Federico Peralta, a Costa Rican agronomist, has established a TWINE AND ROPE factory at San Jose. As this is a new industry the Government of Costa Rica permits the free importation of the machinery required for the installation. The factory is modern and complete in every respect. The city of San Jose is negotiating with a North American contracting firm, for PAVING the streets of the federal capital. Sr. Carlos Iglesias, a Costa Rican mining engineer, has discovered a COAL MINE at Talamanca. Samples of the coal have been sent for analysis to the chemical laboratory of the department of agriculture of the Republic of Costa Rica. — The Department of Fomento of the Government of Costa Rica has contracted with Hopkins & Orlich to construct an AUTOMOBILE ROAD from some convenient point on the Pacific Railway to the interior of the Province of Alajuela. The road is to run through

the canton of San Carlos and will open up to easy communication one of the richest agricultural, forestal, and stock-raising sections of the Republic. —In round numbers the yearly BANANA exports of the port of Limon amount to \$4,500,000. —Some of the finest blooded JERSEY CATTLE to be found in Central America are raised on the Chicua plantation. This stock farm has a herd of 700 Jersey cows. The ranch lies at a high elevation, and cattle raised there are free from ticks and other insect pests. Three particularly fine Jersey bulls have been imported from the United States and Europe for special breeding purposes.

CUBA

The postal MONEY ORDER CONVENTION between Cuba and Mexico, signed ad referendum in the City of Mexico on April 25, 1911, was ratified by the Cuban Senate on May 24, 1912, and ratifications exchanged in the City of Mexico on December 7 of last year. The convention will remain in operation until one year after the date on which either of the high contracting parties expresses its desire to the other to terminate it. The full Spanish text of the convention is published in the "Gaceta Oficial" of the Republic of Cuba in its issue of January 2, 1913. —The Cuban SPORTING WRITERS' Association of Habana have elected the following officers for 1913: Srs. José Canulo Perez, president; José Masaguer, vice president; Alfredo Amenabar, treasurer; and Abel du Bruil, jr., secretary. —The "Gaceta Oficial" of January 7, 1913, published the new rules and regulations governing the WATER SERVICE in the cities of Santiago de Cuba, Pinar del Rio, and Trinidad. —The HORTICULTURAL SOCIETY of Cuba held its annual meeting in Camaguey from the 17th to the 20th of February, 1913. One of the most interesting features of the meeting was the fine display of live stock and fowls on exhibition at Zambrana Park from the 15th to the 25th of the present month. —The new AGRICULTURAL SCHOOL of the Province of Pinar del Rio was inaugurated on the 26th of last month, and the Santiago de Cuba Agricultural School during the present month. —Large SHIPMENTS OF FRUIT are being made regularly to the United States from the Isle of Pines, steamers engaged in this trade carrying consignments of from 600 to 700 crates of tomatoes, peppers, eggplant, and miscellaneous vegetables per trip. —The bronze STATUE erected in memory of the Cuban patriot, Francisco Vicente Aguilera, who freed his slaves when taking up war

against Spain over 50 years ago, was unveiled in Santiago de Cuba on the 24th of this month.—The selected papers of Dr. Carlos J. Finlay, a celebrated Cuban physician who discovered the transmission of YELLOW FEVER by the mosquito, have been published in Spanish and English by the Department of Sanitation of Cuba in a volume containing 557 pages. A beautifully bound copy of same has been officially presented to Dr. Finlay.—The dedication of CANDLER COLLEGE, a Methodist institution of learning founded in 1899 by Prof. Leland, took place on the 23d of last month. The college at present has 40 boarding pupils representing every Province of the Republic. The buildings and grounds are valued at \$50,000.—The temporary quarters of the NATIONAL MUSEUM were opened by the Secretary of Public Instruction in the Jai Alai Building on the 24th of the present month. The museum contains valuable mementoes of Cuban history and the wars of independence, as well as the collections of Cuban artists and scientists.—The Preferred Habana TOBACCO Co., incorporated under the laws of the State of Delaware with a capital of \$2,000,000, has purchased four Habana cigar factories. The new company, of which José M. Diaz is president, intends to establish selling agencies throughout the United States.—The city council of Lajas has received a proposal from Israel Falla for the installation of an ELECTRIC LIGHT and power plant.—The New York Ninere Sugar Co has been authorized to extend its private WHARVES at Manzanillo.—The concession authorizing Loughlin Bros. to construct a wharf at La Esperanza on San Clemente has been forfeited.—Capt. Philip S. Goldsman, of the United States Coast Artillery, who for four years has been an instructor in the Cuban army, has been decorated with the Order of Military Merit.—The work of enlarging several CUBAN PORTS begun on December 15, 1911, by the Bowers Southern Dredging Co., is steadily progressing: the contract approximates \$12,000,000. The work is now under way in the harbors of Isabella de Sagua, Caltanaso, Noevitas, Santiago, and Guantanamo; also in progress in the harbor of Habana, where the company is drilling and blasting away rock obstructions to navigation. The hydraulic work will be completed in 1913 and the rockwork in 1915. According to the estimates, the hydraulic work calls for the removal of 8,000,000 cubic meters of material, and the rockwork 800,000 cubic meters. Three dredges and 160 men are now at work. A feature of the work is that of blasting and taking the rock from Habana Harbor. To do this work there was constructed by the company the drill boat *Cuba*, which is fitted with four spuds, is 130 feet long by 31 feet wide, and operates at one time 16 power drills capable of doing effective work 40 feet below the boat.—The construction of the 38-mile CANAL, which

will give an outlet to the waters in the Roque Valley and so avoid the periodical inundations which for years have caused losses to property amounting to millions of dollars and in many cases death to the inhabitants of that section, is progressing favorably under the direction of Champion & Pascual, of Habana, who have the contract. Members of the Cuban Society of Engineers reviewed the work in December. Some 4 miles have already been opened, representing 375,855 cubic meters of rock, mud, and sand extracted, the work having been done almost on a rocky ground, for which 800,000 pounds of dynamite have been used. A 10,000-pound excavator has been placed on the work, which will greatly facilitate operations.

DOMINICAN REPUBLIC

The *Diario*, a daily newspaper of Santiago de los Caballeros, Dominican Republic, states that President Nouel has changed his CABINET, so that it is now made up as follows: Department of interior and police, Licentiate Andres J. Montolio; foreign relations, Licentiate Elias Brache; justice and public instruction, Licentiate Manuel de J. Viñas; treasury and commerce, Licentiate Eduardo Soler; fomento and communications, Gen. Casimiro N. de Moya; war and marine, Licentiate Jaime Mota; and agriculture and immigration, Señor Emilio Tejera y Bonetti.—The PARCELS POST CONVENTION between the Dominican Republic and the United States, the full Spanish text of which is published in the *Gaceta Oficial* of Santo Domingo of December 11, 1912, became operative on January 1st of the present year.—President Nouel has appointed the following CONSULS: Fernando A. Henriquez, Consul of the Dominican Republic at Santiago de Cuba, and Sr. Osterman Lamarche D, consul at Ponce, Cuba. Sr. Horacio Lamarche, former consul at Santiago de Cuba, has been made Consul General at Kingston, Jamaica.—The demand for LABORERS in the Dominican Republic has been so great recently that an association of planters in the rich agricultural region of San Pedro de Macoris guaranteed work in January last to more than 4,000 Dominican farm hands at a minimum wage of 75 cents per day, plus transportation charges, free hygienic dwellings, and free medical attention and medicines to laborers in need of same during the period of their employment.—The ELECTRIC LIGHT and power company at Puerto Plata has assured the municipal authorities that it will be ready to furnish light and power in May or June of the present year.—The BUDGET

of public works approved by the President of the Republic for 1913 amounts to \$500,000. The improvements contemplated under this budget are as follows: Cart roads: Santiago to Monte Cristy; Azua to San Juan; La Vega to Moca; La Romana to Seybo, and Santiago to San Jose de las Matas; the eastern wharf of Santo Domingo, and the San Pedro de Macoris wharf; the Santa Ana road, and the western road, and railway improvements and surveys. Provision is also made for the construction of a wireless telegraph station. — An executive decree of December 1, 1912, prohibits the PAYMENT of money, after January 1, 1913, out of the Federal treasury, except as provided for in the budget or otherwise legally authorized. — The message of the President of the Republic to the Federal Congress on December 6, 1912, estimates the INDEBTEDNESS of the country pressing for payment at from \$1,500,000 to \$2,000,000. In order to assist in covering this indebtedness a bill was introduced into the Congress, authorizing the President to contract a loan of \$1,000,000 at a rate not in excess of 6 per cent interest annually. — On January 4, 1912, "El Porvenir," an enterprising newspaper of Puerto Plata entered on its forty-second year. This is the oldest newspaper in the Dominican Republic.

ECUADOR

The Congress of Ecuador has ratified the pact concerning CONSULS, celebrated ad referendum in Caracas on July 18, 1911, between the representatives of the Governments of Ecuador, Venezuela, Colombia, Peru, and Bolivia, under which each of the contracting Governments has the right to maintain consular representatives in the cities, commercial centers, and ports of the other of the rank of consuls general, consuls, vice consuls, and commercial agents. Said consular representatives have no diplomatic character and are subject to the laws of the country in which they exercise their functions in everything except that from which they are specially exempted by virtue of the pact referred to or by public treaties. The full text of the pact in Spanish is published in the Official Register of Quito of November 23, 1912. — Work on the TELEGRAPH LINE between Zaruma and Piñas parish was commenced in December last at a point on the banks of the Calera River. — The promoter of the Huigra to Cuenca RAILWAY has advised the authorities that funds have been raised through the Bank of London for the construction of the line, and that the money became available for use in the necessary installments on and after February 1 of the

present year. A company has been organized in England to build this line. —The Central BANK at Quito was installed, with branches at Guayaquil and Cuenca, in February last. —An important mining enterprise has arranged with the Central Bank of Quito to finance the working of MINES in the Republic. —Two new electric STREET CARS of an improved type, similar to those now in use on the Guayaquil electric line, have been added to the tramway service in Guayaquil. —Mr. Julio H. Cardon, concessionaire of the Babahoyo to Balsapamba RAILWAY, is negotiating with foreign capitalists with the object of securing funds for the construction of the line, and the indications are that a strong company will soon be formed for this purpose. —The well-equipped CRACKER FACTORY, "La Ecuatoriana," of Carlos Ferreto N. in Quito, uses flour imported from California in the manufacture of its finest grades of biscuits. —Charles Moore, one of the constructing engineers of the Curaray RAILWAY, has been sent to the United States to represent that company in purchasing material and supplies for the construction of the line. —A ruling of the treasury department of Ecuador places MATCHES in class 23, which subjects them to a duty of 70 centavos per kilo. —The Bank of Ecuador has LOANED the Government of the Republic of Ecuador 150,000 sucres. —The consulate of Ecuador in Berlin is to be made a GENERAL CONSULATE. Mr. Roberto Schumacher, the present consul in the German capital, will be made consul general. —The department of public instruction has contracted for 260 new triumph ADJUSTABLE DESKS manufactured by an American company. These desks are to be used in the schools of the Federal capital. —The canalization, sanitary, and paving board of the city of Bahia de Caraquez has been authorized to construct a WALL to prevent the encroachment of the sea in the northwest section of the city. —The international TELEGRAPH pact, celebrated at Caracas on July 18, 1911, between the representatives of the Governments of Ecuador, Bolivia, Peru, Colombia, and Venezuela, has been approved by the Congress of Ecuador. Under this agreement the contracting nations have arranged to connect their lines and to transmit private international messages to points of destination in the respective countries at regular tariff rates, and Government messages at a reduction of 50 per cent from the regular tariff rates. —The public-school BUDGET of Imbabura for 1913 amounts to 42,554 sucres (sucre = \$0.487 United States currency). —The AGRICULTURAL ASSOCIATION of Ecuador has submitted its rules and regulations to the President of the Republic for approval. —The newspaper entitled "El Comercio" in its issue of December 24, 1912, states that the TAX ON CACAO imposed by statute becomes collectible on and after January 1, 1913.

GUATEMALA

W. J. Parker and Licentiate Juan Barrios M. have petitioned the department of fomento of the Government of Guatemala for a concession permitting them to introduce and establish in the country a new industry, consisting in the exportation on a large scale of **VEGETABLE IVORY** (corozo) and the extraction of oil from the fruit of the cohune palm, for a period of 14 years. The petitioners also ask for permission to make use of the corozo or vegetable ivory found on Government lands in the Departments of Peten, Izabal, and Alta Verapaz, as well as for the free entry of the machinery necessary for breaking the shells of nuts and extracting oil from nuts, together with the gasoline necessary to use as fuel in developing the motive power with which to run the machinery. The same exemptions and privileges granted to employees engaged in the coffee and sugar-cane industries of the country are likewise requested by the concessionaires for the employees required in exploiting and developing the new industry. The right to construct wharves for use in the exportation of the products of the new industry is also requested. The concessionaires offer to pay the Government \$8 per ton of corozo or vegetable ivory exported.—The Republic of Guatemala has at the present time more than 4,000 **PRIMARY SCHOOLS**. There are also five graded institutes or secondary schools in the country. In addition to these the Government maintains a law school, a school of medicine, a school of engineering, a military academy, a conservatory of music, a school for painters, language schools, normal schools, and schools of arts and crafts in different parts of the Republic.—The **BULLETIN** of the department of foreign relations, a monthly publication under the direction of Sr. Maximiliano Cifuentes M., chief of the consular division, will be published regularly, beginning with the first of the present year. The Bulletin is the organ of the Federal Government in making known the activities of the department of foreign relations and was founded in accordance with the wish and recommendation of President Manuel Estrada Cabrera.—The **NATIONAL SCHOOL OF TELEGRAPHY**, under the management of Sr. Julio Amiel, opened its winter session in the city of Guatemala on January 7, 1913. The school is thoroughly equipped and is in a position to turn out first-class practical operators.—The President of France has decorated the President of the Republic of Guatemala, Señor Licentiate Manuel Estrada Cabrera, with the **GRAND CROSS OF THE LEGION OF HONOR**, the highest distinction and the most honorable decoration

that France can give to a foreigner.—On December 26, 1912, the first vessel engaged in DIRECT TRADE between the Argentine Republic and Guatemala anchored at the port of San Jose with a load of 45,000 quintals of yellow corn, flour, and sundry seeds of fruits and cereals. All the grain comprising this shipment was sold on arrival, with the exception of 5,000 quintals of Indian corn, which it is proposed to store and plant in due season for the purpose of learning by field tests the advisability of growing corn in Guatemala from seed brought from the Argentine Republic. The keeping quality of Argentine corn in the climate of Guatemala is good, samples having been preserved in the Argentine consulate in the city of Guatemala for a long time in perfect condition. This first shipment of corn is probably the beginning of an extensive commerce between Guatemala and the Argentine Republic in cereals and allied products.—The Government of Guatemala has contracted with three English professors for the boys' and girls' TRAINING SCHOOLS in the city of Guatemala. These teachers have arrived and taken up their duties at the Federal capital.—A new newspaper under the name of "El Soldado de Oriente" has been started in Chiquimula, Guatemala, under the direction of Leonardo Castillo R. and Pedro A. Zea.



HAITI

The "Moniteur," the official journal of Haiti, publishes the CABLE sent by President Taft on January 1, 1913, to President Tancrede Auguste extending his congratulations and those of the people of the United States on the anniversary of HAITIAN INDEPENDENCE, as well as the reply of President Auguste. In his PROCLAMATION issued to the Haitian people and the Army on the occasion of the one hundred and tenth anniversary of Haitian independence, President Auguste makes a plea for unity of purpose and thought among all Haitians and urges that special attention be given to the development of agriculture, without, however, neglecting other branches of industry.—An official notice has been issued by the secretaries of public works and finance stating that the Government, having decided to undertake important PUBLIC WORKS of urgent necessity, desires to negotiate a LOAN for this purpose, whether from capitalists or from companies contracting for PUBLIC WORKS. In order to carry out its plans, the Government estimates that \$1,500,000 will be needed. The Government

will give its immediate attention to any proposals which it may receive in this connection in order to submit its plans to the Congress in the shortest possible time. Proposals will be received at the departments of public works and finances, Port au Prince. Among the works to be executed are the following: Waterworks at Port au Prince and Gonaïves, Bassin of Joly, construction of a fountain at Aquin, dam for the irrigation of the plain of the Artibonite and of Gonaïves, bridges at Anse à Foleur, Borgne, Port de Paix (including canalization to furnish outlet for the water), Aiz, and other bridges in the north, prisons in all the northern counties, arsenal at Gonaïves, wharf at Port de Paix, lan ling wharf at Cape Haitien, macadamizing of the place in front of the customs bureau at Port au Prince, repairing and rebuilding of the telegraph system of the country, arsenal at Port au Prince, fountain at Petit Goave, bridges in the south, prisons in the south, and reparation of the road between Port au Prince and the plain of Cul-de-Sac (Portail St. Joseph). — The Official Moniteur, of Port au Prince, announces a call for tenders for reconstructing and extending the waterworks at Port au Prince, at an estimated cost of \$300,000 to \$400,000. Tenders, accompanied by plans and description of the scheme suggested, will be received up to April 3, 1913, by the Département des Travaux Publiques, Port au Prince, Haiti, whence copies of the cahier des charges and form of tender can be obtained. — The first baseball game was played at Port au Prince on January 12 between the crew of the American gunboat *Eagle* and a team composed of Americans residing in Port au Prince. — Through the efforts of the Haitian legation in Paris the French Cable Co. has reduced its rates as follows, beginning with January, 1913: Between Haiti and New York, \$0.80; between Haiti and Cuba, \$0.60; between Haitian stations, \$0.28. — M. D. P. Honoré has been appointed customs inspector of the port of Port au Prince. — The President of the Republic has appointed MM. Fernand Lissade Government commissioner to the National Haitian Railroad Co. — The minister of justice has appointed a commission to consider and propose modifications of the penal code and code of criminal instruction. The commission is composed of the following members: MM. Bonamy F. Barao, Louis Born, president, vice president, and judge of the court of cassation; Leon Neu, dean of the civil court; and Auguste Montas, chief of division in the department of justice. — Vital statistics for Port de Paix during the last half of 1912 show 418 births, 93 deaths, and 19 marriages. — An additional duty of 10 cents per pound has been imposed on raw and manufactured tobacco of all kinds imported into Haiti in order to provide funds for the creation of schoolhouses.

HONDURAS

The Government of Honduras has sent five **MILITARY STUDENTS** to the City of Mexico to enter the military college of that Republic in Chapultepec. This is one of the most perfectly equipped and best managed military academies in Latin America. The names of the cadets are as follows: José Benito Mendoza, Eduardo J. Carrasco, Ladislao Santos, Gabriel A. Flores, and Juan R. Molina.—The Congress of the Republic of Honduras has passed a law permitting **FREE IMPORTATION** until June 3, 1913, of lumber for construction purposes, Roman cement, common lime, metallic sheets, paper and cloth roofing, fence wire, and staples.—The Honduran Government has granted a medical scholarship of 50 pesos per month to J. Antonio Irias of the city of Juticalpa, Department of Olancho, to enable him to study medicine in the Republic of Salvador. —Dr. Fausto Davila has petitioned the departments of fomento, public works, and agriculture of the Government of Honduras for a concession to extract and refine **PETROLEUM**, or other similar substances, found in the territory of the Republic, for a period of 50 years. It is proposed to exploit the petroleum industry on a large scale and to give the Government 10 per cent of the product elaborated by the petitioner or his assignees.—Miss Lucila Carias, a young and talented Honduran teacher has been granted by the Federal Government a monthly allowance of \$55, gold, to study **MEDICINE** and surgery in one of the universities of the United States of North America.—A **TYPOGRAPHICAL SOCIETY**, under the name of "Juan de Guttenberg," has been organized in the city of Tegucigalpa. The Government has approved the by-laws of the organization and has recognized the society as a juridic entity. The society will work in the interests of the printing craft and will affiliate with other similar organizations in Central America.—Jerome N. Wilson, of Tegucigalpa, Honduras, has been given a general power of attorney to represent the **CHICAGO TITLE AND TRUST COMPANY** in the Republic of Honduras, and said power has been duly approved and registered in accordance with the laws of Honduras. —The National Water Co. of Wisconsin has registered its **TRADE-MARK**, "Still Rock," under the laws of the Republic of Honduras as a preliminary step to the manufacture and sale of this brand of potable water in the country.—The Standard Typewriter Co., a corporation incorporated under the laws of the State of New York, has registered its **TRADE-MARK**, consisting of the word "Corona," in the Republic of Honduras.—The municipi-

palities of Itubacà and La Esperanza have installed WINDMILLS ordered from the United States for the purpose of obtaining a supply of potable water. — Dr. H. P. Boyce, an American citizen of San Francisco, Cal., temporarily residing in Tegucigalpa, Honduras, has submitted a plan to the department of fomento and public works whereby, if accepted by the former and approved by Congress, he agrees to keep for a period of 10 years the wagon road from San Lorenzo to Tegucigalpa in good repair and to establish a daily AUTOMOBILE freight and passenger service between the Pacific coast and the Federal capital. The plan also includes the operation of gasoline launches between Amapala and San Lorenzo. — The Government of Honduras has authorized Messrs. Mazier & Robertson to exploit gold and silver MINING CLAIMS and placer mines in the jurisdiction of El Viajo, department of Olancha. The region mentioned is said to be one of the richest mining zones of the Republic, and modern methods will be used in exploiting the properties. — Messrs. Montis & Garfield have been authorized by the department of fomento, public works, and agriculture to extend their MINING ZONE "VICTORINA" over an area of 1,000 hectares for the purpose of exploiting their mines on a larger scale. The Government engineer has been ordered to make the survey accordingly.



The bureau of agriculture of Mexico has received from France a shipment of 22,000 FRUIT TREES which are to be distributed to growers throughout the country. Some 27,000 trees from Japan and 17,000 from the United States, among which are 700 seedless orange trees, are expected to arrive soon for further distribution. — Sr. Jose Espinosa Ayala has been appointed to the office of JEFE POLITICO of the northern district of Lower California. Sr. Luis G. Pardo y Ansorena, the new TREASURER GENERAL of Mexico, has assumed full charge of the office. The bureau of lighthouses has named a commission to proceed to Ensenada, Lower California, to report on the proper LIGHTS for that harbor. — A WEATHER BUREAU station is to be established in the middle of Lake Texcoco. A room to shelter the instruments will be constructed on top of an iron tower. — The MACHINERY of the shops at San Juan Tlauhucan is to be removed to the City of Mexico and installed in the school of arts and crafts for men. — A company has been organized in

the city of Puebla with a capital of \$50,000, to rebuild the old THEATER which was destroyed by fire. The concession asked for also provides for the building of smaller theaters for the entertainment of the poorer classes. —Tests are to be made at Veracruz of a new BOAT BUOY which carries a lamp at an elevation of 7 meters from the surface of the water, giving it a range of between 7 and 8 miles. The first of these buoys will be placed near the Pajaros reef. —A contract for the construction of an ELECTRIC TRAMWAY system for the city of Durango and suburban points has been approved by the State legislature. —A contract for the installation of a WATERWORKS system in the city of Matamoros has been approved by the State legislature of Tamaulipas. —It is announced from Puebla that the work of changing the animal traction street car system to an electric system will take about six weeks. The survey work and plans have been completed and actual construction will be pushed through. —The Mexican Herald of January 16 has the following: "The new branch of the national lines which eventually will give a new connection with the United States, connecting with the Kansas City & Orient line at the border, has been opened for a length of 47 kilometers. Beginning at Allende, Chihuahua, the new branch runs as far as Esmeralda, passing through the stations of Morelos, Zaragoza, and Davila. The first two towns hold valuable water rights for irrigation purposes and the region is a rich one. The district has great possibilities in the agricultural line and is expected to supply a great quantity of fruit and vegetables for American markets. It will also enable the Kansas City & Orient to enter into competition with other lines touching the border in the transportation of Mexican freight." —A news item in the Mexican Herald states that the Spanish chamber of commerce has taken up the question of a parcels post treaty between Spain and Mexico. An address on the subject is to be delivered at an early date before the members of the organization by the Spanish Minister Bernardo J. de Cologan. —The city council of Tuxtla Gutierrez, Chiapas, has taken up the project of a new water system for the town. A local capitalist has agreed to lend the money and local engineers have promised to superintend the work without making any charge for their services. —The Guadalajara Times of January 11, 1913, has the following interesting item relative to the AGRICULTURAL PRODUCTION of the State of Jalisco, Mexico, for the year 1912: "According to the report just compiled by the Cámara Agrícola Jalisciense, the agricultural products of Jalisco in the year 1912 had a value approximately of \$35,723,850. Corn is the principal product of this State, and in the year just closed had value of \$22,750,000, or nearly two-thirds of the entire agricultural production. Wheat ranks next with a production of between 200,000 and 250,000 cargoes of 161 kilos, and an estimated value of \$3,600,000. The sugar pro-

duction amounted to over 14,000,000 kilos with a value of \$2,900,000. The value of the alcohol is placed at \$1,450,000 and of "vino mezcal" at \$1,100,000. Other important products are given as follows: Beans, \$208,000; rice, \$88,000; barley, \$225,000; coffee, \$65,000; chicle, \$75,000; cotton, \$20,700; tobacco, \$48,000; garbanzo, \$356,000; linseed, \$434,000; and coquito oil, \$125,000. (Mexican dollar equals \$0.498 United States currency).—A body of COPPER ORE averaging 8 per cent was recently cut on the 300-foot level of the old Cerritos copper mine in the Ameca district. Some of the ore taken out runs very high. — The governor of Sinaloa has set on foot a project for the establishment of a permanent EXHIBIT of the products of the State of Culiacan, the capital. Circulars have been issued urging manufacturers and agriculturalists to see that their products are represented at the Colima exposition to be held next month and also at the San Francisco, Cal., world's exposition. — According to the Mexican Herald of January 13, 1913, an amendment has been made to the contract between the Government and the Southern Steamship & Banana Co. for STEAMER SERVICE between Frontera and the ports of Galveston and New Orleans, whereby the life of the contract is extend for four years. For the first six months of the extension the company will receive a subsidy of \$1,000 per month for each round trip of a steamship in accordance with a schedule submitted. — COLLECTIONS at the customhouses of the Republic during the month of December, 1912, amounted to \$5,235,933.37 (Mexican currency) the largest sum ever collected in a single month.



NICARAGUA

President Adolfo Diaz, after taking his oath of office on January 1, 1913, delivered an interesting MESSAGE to the Congress, in which he said that it would be his policy, in the first place, to establish the bases of the Republic morally and materially for the purpose of securing liberty to the citizen and a guarantee of his individual rights; that peace being an indispensable medium for the promotion of the public weal every effort would be made to effect its realization; that the relations of the Republic are peaceable and cordial with all nations, and particularly with Central America and the United States of North America, with which the Government comes in the most intimate contact, and that it is his intention to encourage the development of the country by increasing its resources, establishing credit, and meeting the legitimate expenses of the Government by a system

of equitable and moderate taxation. The solution of the money question having been attained by the establishment of a stable currency; the president is in favor of the construction of a railway to the Atlantic coast, an increase in the number and efficiency of the public schools, and the development of the agricultural wealth of the country. —In conformity with the power vested in the president of the republic by a legislative decree of December 19, 1912, President Diaz has made the following appointments of MUNICIPAL OFFICERS for 1913: Leon, alcalde, J. J. Palma; Linotepe, alcalde, Nemesio Porras G.; Jinotega, alcalde, Lizandro Moreira; Rivas, alcalde, Juan J. Ruiz; Masaya, alcalde, J. Carmen Morales; Managua, alcalde, Camilo Barberena; Bluefields, alcalde, Humberto Martinez; Granada, alcalde, Juan Ig. Urtecho; Ocotal, alcalde, Prospero B. Moncada; Somoto, alcalde, Leandro Tercero S.; Acóyapa, alcalde, J. Augustin Baez; and Chinandega, alcalde, Francisco Solis. —At the inaugural ball, held in Managua on December 31, 1912, the Nicaraguan musician and composer, Sr. Luis A. Delgadillo, composed the WALZ, played by the Vega Matus Orchestra at the Managua Club. —The paper currency retired from circulation in Nicaragua up to the first of the present year amounts, in round numbers, to 20,000,000 pesos. The "Córdova," the new Nicaraguan coin, represents the same value as an American dollar. —Dr. Buitrago Diaz has resigned as alternate magistrate of the Central American COURT OF JUSTICE, and Dr. Alfonso Ayon as magistrate of the civil appeal court. Both resignations have been accepted. —The national congress of the Republic of Nicaragua decreed on December 18, 1912, that the BUDGET of March 1, 1910, and the complementary credit of June 1st of the same year, should continue effective until the Congress substitutes another budget and complementary credit. —President Diaz has appointed the following gentlemen to serve as OFFICERS of the municipality of Bluefields for the ensuing year: Alcalde, H. Martinez, Ph. G.; alternate alcalde, Dr. W. K. Ingram; city attorney, Buenaventura Cardenas; aldermen, Reginald H. Hooker, Dr. Justo P. Lopez, Joaquin Estrada, and George S. Hodgson. —A recent dispatch to *The American*, of Bluefields, states that it is assured that Engineer Adolfo Cardenas will be appointed DIRECTOR OF PUBLIC WORKS. Also that Sub-secretary Amador, appointed to take charge of the ministry of fomento, assumed his duties on January 6, 1913. —In the session of the assembly of Nicaragua, held January 8, 1913, the commission which is to pass upon the project of a new constitution was appointed as follows: Deputies T. Castillo, Jose Leon Roman y Reyes, and Rafael Urtecho. —The office of commandant of the powder barracks at Granada, carrying a monthly salary of 500 pesos (peso equals \$0.462 United States currency) was recently created and Mauricio Medina appointed as the first incumbent.

PANAMA

A press dispatch from Panama states that the National Assembly passed a bill January 16, 1913, authorizing the expense of a NATIONAL EXPOSITION to commemorate Balboa's discovery, and empowering the executive to invite the United States, Spain, and the neighboring Latin-American Republics to send delegates. — A proposal to fix the price of the WASTE LANDS of the Republic between 2½ and 6 balboas a hectare is before the National Assembly of Panama (balboa equals \$1 United States gold). The proposal is being strongly opposed by the Star and Herald in its editorial columns in the January 13 issue. — A recent news item in the Star and Herald of Panama states that the CARGO HANDLING on the docks located at Balboa was taken over by the quartermaster's department of the Isthmian Canal Commission on January 1. While this work will be directed by that department, the laborers will continue to be carried on the rolls of the Panama Railroad Co. About 550 men are employed in the handling of cargo during the day and 250 at night. — A recently enacted law authorizes the President of Panama to contract a loan not exceeding \$1,500,000 (United States), the proceeds of which are to be expended in the construction of the following BUILDINGS: Two for schools of agriculture; one for a girls' normal school; one for a professional school for women; one for a house of detention for women; one which shall be fireproof and which shall be used for the National Library Archives and Museum and at the same time for the notaries for the registration of property, births, marriages, and deaths, and for the Bureau of Statistics; one for a penitentiary; one for a reformatory school for minors; and one for a school for aborigines. The Government is also authorized to construct the necessary additions for enlarging the National Industrial School and for effecting the transfer of the Bolivar Asylum to a place more convenient than the one it now occupies. The law provides that the work of construction may be done either by the Government itself or by contract through public bidding. The loan is to be for a term of not less than 50 years and to bear interest not greater than 6 per cent per annum. — The National Assembly of Panama recently enacted a law to encourage COTTON MANUFACTURING in the Republic. The executive is authorized to accord certain privileges to individuals or companies who formally make application therefor. Among these privileges is included the importation, free of all duty, for 10 years, of machinery destined exclusively for the manufacture of yarns (hilados) and tissues of cotton, and the free importation of primary materials for the same industry (cotton and hilazas so

long as they are not produced in the country in quantities sufficient for the needs of manufactories. —A recent press report states that by order of the Canal Commission a complete LIST is being drawn up of all the machinery, implements, fixtures, and material no longer required for the canal works and which are for sale on the Isthmus. A number of railroad companies of Central and South America are reported as prospective buyers, especially a prominent company of Colombia. —The National Assembly of Panama recently passed a bill authorizing the executive to expend the sum of \$100,000 gold to CELEBRATE fittingly the opening of the Panama Canal. —At the same session of the assembly a bill passed its third reading which provides for the office of INTERPRETER in the department of foreign relations at a salary of \$100 gold a month; also for the appointment of two technical instructors for the police department at salaries of \$200 gold a month each; one physician at \$175 gold a month; the appointment of a bookkeeper in the treasury at Colon at \$100 a month, and numerous minor offices. —According to a news item in the Star and Herald, of Panama, of January 20, Mr. Francisco Mallen has taken over the duties of CONSUL GENERAL of Mexico in Panama. —A bill providing for the filling in of low-lying lands in the town of Almirante, Province of Bocas del Toro, and for the construction, in cooperation with the town, of an AQUEDUCT, was passed on its first reading by the General Assembly of Panama January 19, 1913. —In her maiden trip, completed in January, the steamer *Evangeline*, of the Peninsular Occidental Steamship Co., brought to Panama 200 TOURISTS who had embarked at Key West, Fla. —The steamship *Moltke*, of the Hamburg-American Line, docked at Panama on January 19, bringing between 250 and 300 TOURISTS, who spent the day seeing Panama and the canal. —During December last the Canal Zone post offices issued 22,972 MONEY ORDERS for a total amount of \$423,851.53. There was also sold \$10,611 worth of postage stamps, of which \$6,306.60 went to the Government of Panama. —A new road is being built from the Diablo flag station on the Panama Railroad to a point in Ancon near the Tivoli, the road paralleling the railroad most of the way. It will have a width of 16 feet and be 9,600 feet long.

PARAGUAY

Work in the QUEBRACHO forests of the Chaco region of Paraguay, which has been suspended in some sections during the past year, was resumed on a number of properties early in 1913. The prospects for an increase in the production of Paraguayan quebracho and Para-

guayan cedar in 1913 as compared with 1912 are very flattering. Considerable activity is also being shown in the CATTLE industry of the Chaco region. Newspaper comments throughout the Republic indicate a growing sentiment, especially in the cities, in favor of the protection of the live-stock industry of the nation, and particularly of the large grazing section bordering on the Argentine Chaco, by the imposition of export duties on cattle on the hoof. The levying of such duties is being agitated in the Republic, but as yet no protective laws covering this subject have received the sanction of the present Congress. — The Government of Paraguay has completed its TELEGRAPH LINE to Caazapa, thereby connecting by wire that important commercial center, via Maciel-Mbuyapey, with the Government telegraph system of the Republic. Work has been resumed on the construction of a TELEGRAPH line from Ajos to San Jose, and from Ajos in the direction of Villarica, with the intention of connecting the northeast cordillera line with the southeast or Mision to Encarnacion line, so as to place these important regions in direct telegraphic communication with the Federal capital and with each other. A STAGE LINE has been established between Villarica and Caaguazu and intermediate points, such as San Ignacio and other important villages and ranches. This line makes weekly connection with the postal stage line from Paraguari to the interior of Misiones. A branch TELEGRAPH LINE is being constructed from Yuty to San Juan Nepomuceno and Tabay, and will ultimately be extended to the port of Yaguarazapa on the Upper Parana River opposite the recently established Argentine colony of "Campo Grande." The secretary of foreign relations of the Argentine Government has requested from the Government of Paraguay a copy of all laws and decrees now in force concerning AGRICULTURE and allied industries, forests, and waterways, as well as such laws as may be enacted in future bearing upon these subjects. — The Government of Paraguay has received, through the minister of the United States of America accredited to that country, an invitation to participate in the Fourth International Congress of SCHOOL HYGIENE to be held in Buffalo, N. Y., from the 25th to the 30th of August, 1913. The invitation has been accepted and delegates will be appointed in due course. — Sr. Erasmo Santi, jr., a distinguished literary writer and publicist, has been appointed CONSUL of Paraguay at Bastia, Corsica. — The Agricultural Bank at Asuncion has ordered a large quantity of Havana TOBACCO SEED for distribution to tobacco planters and others interested in tobacco culture throughout the Republic. Great efforts are being made to improve the already excellent quality of Paraguayan tobacco grown in the country and to make it equal, as nearly as possible, to the most celebrated grades of Cuban tobacco. A large demand has grown up in Argentina and

Uruguay for Paraguayan leaf tobacco, and the constantly increasing production is as yet insufficient to supply the growing demand for this article.—A branch of the Hispano-American BANK has been opened in Asuncion. A group of Argentine capitalists also propose to found a new bank in the capital of Paraguay to specially engage in building operations in the Republic. The Mercantile Bank at Asuncion has added a mortgage section, and will establish branches in the chief cities of the country. The Spanish Bank of Buenos Aires is considering the advisability of extending its operations into Paraguay by opening a branch bank in Asuncion. The export and import house of Hermann Crabb & Co., of Hamburg, Germany, has inaugurated a line of FREIGHT STEAMERS, called the Teutonia Empresa de Navegacion de Hermann Crabb y Cia., to facilitate its trade between Montevideo and Asuncion. The first steamer made its maiden trip in October, 1912. A second steamer is about to be put on the line, and in the near future boats will be added sufficient to give a weekly service between Montevideo and Asuncion. The vessels are new, being built for this line. They are of 1,000 tons burden, capable of making 12 knots an hour. The second steamer, about to be put on the line, is oil burning. The new line holds itself out as a common carrier and offers certain advantages over facilities heretofore available in sending goods to Asuncion. Freight arriving at Montevideo will be transferred directly to the lighters or warehouses of the company, thus avoiding all the details of forwarding usually dependent upon transshipping agents. It will not now be necessary to send freight from Montevideo to Buenos Aires for transshipment to Asuncion. The steamers of the new line will run express to Asuncion, making no stops in Argentine territory. This is a great saving of time.



PERU

Official customs statistics recently made available show a gain of over \$1,600,000 in the value of Peruvian EXPORTS during 1911 as compared with 1910. The United Kingdom leads in the value of purchases, followed by the United States, Chile, Germany, and France in the order named.—A recent report of United States Consul Fuller at Iquitos deals with the nature of the stocks of MERCHANDISE kept in the stores of the company exploiting the rubber tracts of the Putumayo region, to be used in barter for rubber with the Indians. Relative to the canned goods used, the consul states that "the foodstuffs, the better qualities of which are provided for the company's Caucasian staff, but some of which are also used in

trade with the Indians, are all put in tin. The canned salmon and canned fruit are American, put up mostly under the label of a New York firm of exporting grocers whose mark is well known throughout the Department of Loreto. A little of the canned fruit comes from Spain. The salmon is all of the cheaper qualities and is put up in 1-pound cans of the high cylindrical shape, packed in cases of 24 or 48 cans each. The fruit is of fair quality and comes in 1-pound cans packed 48 to the case. The canned meat is both American and English and is put up in cases of forty-eight 1-pound tins. The canned vegetables are mostly French. The milk is English, Swiss, and German. The soda crackers, of which there is a large consumption in proportion to the number of inhabitants, are all American and are received in sealed tin boxes. All the other biscuits are similarly packed but are English and German. Aside from salmon and biscuits, the consumption is limited to the wants of about 150 Caucasians." As to articles of clothing the report states that "cheap black felt hats come from Italy and the United States; cloth caps are French. Ready-made trousers of fair quality are mostly French, although some come from England. Working shirts are of French and English origin. American jeans, drills, and cotton prints are purchased and made up into women's cushmas, or loose gowns, and other garments, as well as being traded to the Indians in the piece. French knit cotton undershirts of cheap quality, in gaudy colors, are carried in stock." — The Chamber of Deputies at Lima has approved the appropriation of a fund of \$100,000 for erecting WIRELESS STATIONS at Arequipa and at Puerto Maldonado in the Madre de Dios region, while the one to be erected at Paita will be built out of the surplus income from the wireless system. Later another station will probably be established inland, in the extreme northern border of the Republic. With the improvement at the wireless stations at Panama and Colon it is likely that communication with the United States will soon be practicable. — By a decree dated November 9 the Cuerpo de Ingenieros de Minas y de Aguas is given charge of the technical consulting and directive work of the IRRIGATION SERVICE as well as of mines, the last three words of the official title of the body being added to indicate its new functions. TELEGRAPHIC COMMUNICATION was officially recognized as open between Caracas, Venezuela, and Lima, when dispatches were exchanged in November, 1912, between the director of posts and telegraphs of Venezuela and Mr. Frederico Lama y Peralta, who holds the corresponding office at Lima. The State lines of Colombia, Ecuador, Venezuela, and Peru are directly connected. Peru will at once make arrangements for similar connections with Bolivia and Chile, with which telegraphic communication is now carried on by cable or by cable and State lines in connection with the

lines of the Southern Railways.—An ELECTRIC LIGHT and power plant is ordered for Boquete ranch, the operation of the coffee machinery and other equipment by that means being contemplated.—The Peruvian director general of posts and telegraphs has announced that beginning with January 1, 1913, the rates adopted at the First South American Continental Postal Congress, held at Montevideo, Uruguay, in January and February of 1911, went into effect in Peru. The Congress referred to adopted a POSTAL CONVENTION modifying the universal postal convention as applying to mail sent from one South American country to another. The convention has been agreed to by Peru, Bolivia, Chile, Colombia, Paraguay, and Uruguay. The Bulletin of the Pan American Union printed the text of the agreement in its issue for April, 1911.—The proposal to extend the railway now operating between Tambo de Mora and Chinchá to Castrovirreyna and Huancavelica has now been accepted by the Government, and a concession has been granted to the Tambo de Mora Railroad Co. (La Empresa del Muelle y Ferrocarril de Tambo de Mora), of Tambo de Mora, Peru, to construct and operate this railroad for a period of 90 years, when the line and its rolling stock will revert to the Government without the payment of any indemnity to the company.—Mr. Juan Vallarino has been named consul of Peru at Bremen in place of Mr. Alfredo Benavides.—The West Coast Leader, of Lima, Peru, states that the steamer *Howick Hall* has unloaded a cargo of STEEL RAILS from California at Callao. Also that 300 horses and mules, along with an increased amount of general cargo, were brought from Valparaiso by the *Urubamba* to Callao.—A news item from Callao states that the Guadalupe shops of the Central Railway have just turned out a new PASSENGER CAR, which is equal in every way to those heretofore imported.—For some time the WEST COAST LEADER, of Lima, has been conducting a campaign for the adoption of a form for the written expression of amounts in PERUVIAN CURRENCY. Special committees were appointed by the chamber of commerce and the exchange (Bolsa Comercial) to decide upon the best form and their reports were unanimously adopted by these bodies. The legal unit of money in Peru is the pound, which is of identical value with the pound sterling of Great Britain, which is divided into 10 soles and each sole into 100 centavos. The system adopted gives the following method of written expression: "Lp. 1,825. 8. 50," meaning 1,825 pounds, 8 soles, and 50 centavos. The system provides that ciphers must be used in the absence of any of the three denominations, as "Lp. 0. 8. 50" or "Lp. 1,825. 0. 50," and that a point and a dash indicate the absence of both soles and centavos, as "Lp. 1,825. —". Commas are to be used only to point off integral thousands.

SALVADOR

The consul of Salvador in New York has compiled figures showing that the EXPORTS OF MERCHANDISE from the United States to the Republic of Salvador in 1912 consisted of merchandise valued at \$2,133,745.27. The principal articles and values are as follows: Cotton goods, including domestics, drills, calicoes, and cotton fabrics, \$694,961.86; railway material, \$198,767.19; hardware, \$138,921.88; sewing-machines, \$125,522.77; drugs and medicines, \$124,936.42; general machinery, \$122,128.76; prepared hides, \$116,753.26; lard, \$74,932.24; mining machinery and supplies, \$70,719.46; paper and stationery, \$47,113.30, and paints, oils, varnishes, and blacking, \$31,615.05. A society has been organized in the capital of the Republic of Salvador under the name of "Sara de Zaldívar," the object of which is to establish and maintain in the city of San Salvador a TRAINING SCHOOL FOR WOMEN. The President of the Republic has approved the by-laws of the society, published in 1912 in the *Diario Oficial* No. 245. The organization is supported by the leading men and women of the Republic, and will fill a long-felt want in that country in the education and training of women in the useful and practical arts.— More than 100 PUBLIC WORKS will be inaugurated in the Republic of Salvador on March 1, 1913, all of which have been completed under the able and progressive administration of the late President Manuel Araujo. This great activity in the erection of public buildings and works shows that the Republic of Salvador is enjoying a notable period of prosperity. Among these improvements are 10 buildings for public schools, indicating in a substantial manner the great interest the Government is taking in the educational development of the country. Recent statistics give the number of public schools in the Republic in 1912 as 515 schools for boys, 212 schools for girls, 101 mixed schools, and 36 night schools. An interesting MAGAZINE entitled the "Grano de Arena" (Grain of Sand), containing a choice selection of articles of literary merit, is being published in the city of San Salvador under the direction of Sr. Manuel Masferrer C. and Sr. Abraham Ramírez Peña. It is reported that the Occidental BANK of the City of San Salvador is to increase its present capital of 1,000,000 pesos. On November 1 of last year this institution had bank notes in circulation amounting to 1,812,818 pesos, a reserve fund on hand of 560,000 pesos, and account current aggregating 1,878,162 pesos. The scarcity of POTABLE WATER at Metapan has induced that city to provide new piping for conveying water from a nearby stream to the deposit tanks. The INTERNATIONAL CLUB of the city of San Salvador has elected

the following officers for 1913: Leon Imberton, president; Benjamin Oleovich and Walter de Sola, vice presidents; Ricardo Sagrera, secretary; George Harrison, treasurer, and Adolfo Cabella, librarian. In November, 1912, the CABLE, telegraph, and telephone lines of the Republic of Salvador produced gross receipts amounting to 37,903.25 pesos. —The shops of the SALVADOR RAILWAY Co. at Sonsonante, Republic of Salvador, are among the best equipped railway shops in Latin America. The steel passenger, freight, and platform cars turned out from these shops are said to be equal in quality and finish to those made in the best constructing car shops in the United States. Locomotives are built in these shops by Salvadoran trained mechanics, who are as clever and up-to-date as those employed in the shops of Europe and the United States. The railway shops at Sonsonante are nominally under the direction of English mechanics, but the workmen and skilled artisans are principally Salvadorans. —The steamship RATES in force per ton of 2,000 pounds for the transportation of Salvadoran coffee of the crop of 1912-13 from the ports of the Republic to the United States are as follows: To San Francisco, \$10; to Tacoma, Portland, and Seattle, \$11, and to New York, \$14.

URUGUAY

The report of the Montevideo TELEPHONE CO. for the year ended July 1, 1912, shows a net profit of \$122,242, as against \$107,764 for the fiscal year 1911. After paying all debits a dividend of 5 per cent was paid on the preferred stock and 6 per cent on the ordinary shares, leaving a balance of \$21,000 to be carried forward. —A project has been presented to the Chambers the object of which is the establishment of a SEROTHERAPEUTIC LABORATORY in the School of Hygiene, for which 100,000 pesos (\$103,400 United States currency) is asked. The organization of the INSTITUTE OF GEOLOGY has been completed by adding Dr. Montrose Lee, geologist, Fletcher G. Downe, surveyor, and B. W. Ritse, expert in borings, to the staff of the institution. The first two mentioned are from the United States. —Since December 11 the Lamport & Holt Steamship Co. has inaugurated its FORTNIGHTLY SERVICE between the River Plate and New York, the steamers used being the *Vestris*, *Vasari*, *Verdi*, *Voltaire*, and *Veronese*. —According to recent consular reports the frozen MEAT INDUSTRY of Uruguay continues to grow. For the first 10 months of 1912 there were exported 257,327 carcasses of frozen mutton and 226,069 quarters of frozen beef, as compared with 220,529 carcasses of mutton and 83,231 quarters of beef in the corresponding period of 1911. —A proposal has been made to the Uruguayan Government by the South American Iron

Syndicate (Ltd.), capital \$1,000,000, to establish a large FOUNDRY at Montevideo for making all classes of iron and steel goods, such as machines, rails, wire, beams, plates, etc. Besides the free importation of metals in ingots the syndicate asks that existing duties on similar manufactured articles be maintained, and that coal and coke used shall be free from customs duties for 15 years. A BRANCH of the Central Uruguay Railway 7.5 miles long is to be constructed from Pampa Station (Tacuarembó) to Cerro Paraguay to furnish an outlet for the deposit of manganese near the former place. According to the terms of the arrangement, the State will construct the line and lease it to the Central Railway at \$739 per kilometer (0.62 mile) per annum for a maximum period of 15 years.—Work on the PAN AMERICAN RAILWAY is being advanced with every means at hand; several new engineers and a large force of men have been added.—The Pan American Railway Co. has received the materials for the BRIDGES over the Maciel and Porongos Rivers and the international bridge over the Cuareim River between Uruguay and Brazil.—Mr. William Whytes has presented a proposal for the construction of an international BRIDGE across the Uruguay River, extending from the city of Salto to Concordia, Argentina, the bridge and approaches to be $4\frac{1}{2}$ miles in length. The project has been sanctioned by the Argentine Senate and reported on favorably by the Lower Chamber. A recent consular report states that the following information has been supplied by the directors of the Central Uruguay Railway Co., relative to the EARNINGS of the several interests under their control, for the year ended June 30, 1912:

Main line.—After providing for debenture interest, the rent of the Northeastern line, the dividend on the preferred shares, the interim dividend on the ordinary stock paid last April, and other charges, there remains an available balance of \$455,032, as compared with \$336,134 for the previous year. The board proposes to transfer \$48,665 to the general reserve fund and \$24,333 to the pension fund, and to pay a balance dividend of $3\frac{1}{2}$ per cent, less tax, making 6 per cent, less tax, for the year, carrying forward \$61,255. In the fiscal year 1911, \$48,665 was transferred to the general renewal funds, and a final dividend of $2\frac{1}{4}$ per cent was paid, making $5\frac{1}{2}$ per cent for the year; the sum carried forward was \$35,423. *Eastern extension.* After providing for debenture interest, the dividend on preferred shares, and the interim dividend on the ordinary shares, the balance of net revenue for the year ended June 30, 1912, amounts to \$155,665, against \$153,592 for the previous year. The board proposes to pay a balance dividend of \$1.64 per share, less tax, making \$2.80 per share for the year, equal to $5\frac{1}{4}$ per cent, less tax, carrying forward \$22,654. In the fiscal year 1911 the final dividend was \$1.52 per share, making \$2.56 for the year, and \$39,029 was carried forward. *Northern extension.* After providing for the debenture interest and

the interim dividend paid last April, the balance of net revenue for the year ended June 30, 1912, amounts to \$118,426, as against \$108,961 for the previous year. The board proposes to pay a balance dividend of \$1.22, less tax, making \$2.31 per share for the year, equal to 4 $\frac{3}{4}$ per cent, less tax, carrying forward \$3,859. In the fiscal year 1911 the final distribution was \$1.03 per share, making \$2.07 per share for the year, and the sum of \$11,582 was carried forward. As to the Midland Uruguay Railway, it is stated that the directors' report for the fiscal year 1911-12 shows the following figures: Gross receipts, \$566,801, increase, \$79,216; working expenses, \$391,967, increase, \$83,294; net profit, \$140,768, increase, \$21,607. The line to Fray Bentos (87 miles) was opened for traffic during the year, making a total of 283.41 miles in operation, compared with 237.57 miles in 1910-11. There were 63,346 passengers carried, an increase of 37.71 per cent, the receipts showing an increase of 27.25 per cent. Freight traffic, exclusive of the company's materials, was 105,861 tons, compared with 91,924 tons the previous year, an increase of 15.16 per cent, with a 9.98 per cent rise in receipts. The receipts per ton were \$1,995, against \$2,039 in 1910-11, the expenses being \$1,504 per mile, compared with \$1,552. —The Uruguayan Senate has approved a bill appropriating \$40,000 for the installation of a VETERINARY POLYCLINIC. —A recent press dispatch states that the Spanish Transatlantic Co. will shortly put two large and very rapid PASSENGER SHIPS on the River Plate service. These ships will be the *Reina Victoria Eugenia* and the *Infanta Isabel de Bourbon*. It is estimated that the new ships will cover the distance between Cadiz and Montevideo in less than 13 days, and it is anticipated that the first voyage will be made in April. According to the Montevideo Times, in September, 1913, there will be added to the River Plate service of the Hamburg South American Steamship Co. a MONSTER LINER, the largest and most rapid that has ever entered the River Plate. This steamer will be named the *Cap Trafalgar*. It will have a tonnage of 18,000 and a speed of over 18 knots an hour, thus enabling it to do the trip from Lisbon to Buenos Aires in something under 12 $\frac{1}{2}$ days. —The CONGRESS FOR THE PROTECTION OF AGRICULTURE, the meeting of which the October, 1912, Bulletin stated was to have been held in November of that year, has been postponed to meet in Montevideo in April, 1913. The Governments of Argentina, Brazil, Chile, and Paraguay have been invited to participate in the proceedings. The program will include discussions under the following general heads: (1) Protection against locusts; (2) regular telegraphic service concerning the movements of locusts and other agricultural pests; (3) preventive and combative methods against all other agricultural pests; (4) the celebration of a protocol by the participating nations concerning these subjects, and (5) miscellaneous topics.

bank east to Piacoa. The extension on to Imataca will also soon be finished.—An ACETYLENE PLANT has been installed at the light-house established at Punta Barima, increasing the force of the light at that point. The keeper has forwarded a report which gives the depth of water in two of the mouths of the Orinoco, stating that in the Macareo Passage the depth of water is at least $13\frac{1}{2}$ and 14 feet, in the Baradero Passage the depth is 15 feet, while all the other principal passages had greater depths on November 5.—According to a recent report of United States Consul Voetter at La Guaira the apparent increased PROSPERITY of Venezuela for 1911 compared with previous years can in a large measure be attributed to the high price of coffee, the chief exportable product of the country. Another element was a feeling of security from domestic disturbances on the part of business interests. The exports for the entire country in 1911 were valued at \$22,676,974 compared with \$17,948,570 in 1910. The shipments to the United States increased from \$6,305,485 in 1910 to \$7,083,264. The greatest gain was in the exports to Germany, which country took goods valued at \$4,269,221, compared with \$2,313,556 for 1910. A slight decrease in exports to Great Britain and colonies is shown. Exports to other countries showed increases.—Recent consular advices state that the value of the IMPORTS into the consular district of Puerto Cabello during 1911 far exceeded that of the last seven preceding years. The United States made a gain of \$380,712 over 1910 and was second only to England in the imports into this district. The total imports were valued at \$3,489,826 compared with \$2,344,748 for 1910, of which the United States furnished merchandise valued at \$814,560, against \$1,357,378 for the United Kingdom, \$650,752 for Germany, \$263,754 for the Netherlands, \$164,674 for Spain, \$115,494 for France, and \$123,214 for Italy.—The copper mines of Tucacas have been working and making regular shipments of copper ore to England.—The factory established by the Venezuelan Government for the making of BRIQUETS has had a successful year. It has manufactured all coal used by the Government for its navy yard, dry docks, and warships.—A factory for the manufacture of CONDENSED MILK and cheese has been established at Maracay.—The Venezuelan Meat & Products Syndicate (Ltd.), of Puerto Cabello, has INCREASED the capacity of its plant from the killing of 80 to 120 beeves per day. —The Venezuela Telephone & Electrical Appliances Co. (Ltd.) has extended its system to cover the WHOLE DISTRICT of Puerto Cabello. —Chargé d'Affaires Jefferson Caffery, of the American Legation in Caracas, reports that the Venezuelan Government has ordered that SAMPLES of the national products of Venezuela be placed on exhibition in the Venezuelan consulates at Antwerp, Amsterdam, Barcelona, Genoa, Hamburg, Liverpool, London, New York, New Orleans, Ottawa, and Yokohama.

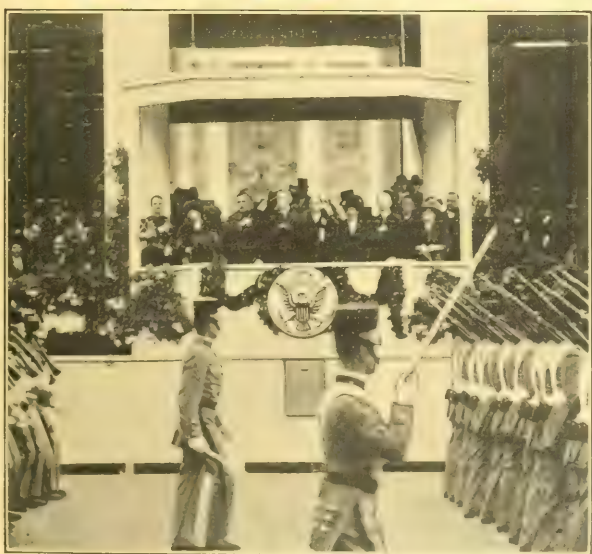
MARCH 1913

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¹ Absent.



Photograph by Harris Ewing.

HON. WOODROW WILSON, PRESIDENT OF THE UNITED STATES, AND HIS CABINET.

From left to right around the table, The President, Hon. William G. McAdoo, Secretary of the Treasury, Hon. James C. McReynolds, Attorney General, Hon. Josephus Daniels, Secretary of the Navy, Hon. David F. Houston, Secretary of Agriculture, Hon. William B. Wilson, Secretary of Labor, Hon. William C. Redfield, Secretary of Commerce, Hon. Franklin K. Lane, Secretary of the Interior, Hon. Albert S. Rudelson, Postmaster General, Hon. Landley M. Garrison, Secretary of War, Hon. William J. Bryan, Secretary of State.

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O those who are giving attention to the history and especially to the present day progress of South America, there is no more interesting study than that of scaling or penetrating the Cordillera and connecting the two oceans.¹

That the Incas had trails from west to east is a recognized fact, and to-day one of their old highways through Peru and Bolivia is utilized for commerce. They had also attempted conquest on the eastern slope of the mountains, and after the conquest they escaped by roads built from the plateaus into the Amazon Valley. The first recorded passage of a white man is that of the venturesome and foolhardy Pizarro (the younger brother of the conqueror), who in 1519 wandered from Quito in Ecuador while searching for El Dorado and drifted down the Amazon to the Atlantic Ocean.

In recent times, after the construction of railways had put new life into the question, an ambitious attempt was projected and begun by the far-sighted Yankee, William Wheelwright, who, in 1851, built the first railway in South America, from Caldera to Copiapo, Chile, its ultimate destination being, according to his vision, Buenos Aires. The final victory of linking the two oceans by this rapid means of transportation was accomplished in 1910 by the Transandine Railway, almost in a straight line of 888 miles between the two oceans. This pierces the mountain at an altitude of 10,000 feet, and brings the two coasts within 48 hours of each other.

¹ For a full description of the Transandine Railway, see the article on page 333. The railway to connect the two oceans in this southern latitude, is in preparation for the BULLETIN.



Photograph by Reginald Gorham

A SKYSCRAPER IN BUENOS AIRES.

This building, said to be the first skyscraper in South America, stands on the Paseo Colon not far from the new customhouse and in the vicinity of the great docks. It is intended to serve as a clearing house for the several important railroads which radiate from Buenos Aires, the starting point for the journey described.

But this lofty triumph is by no means the only pass—via Uspallata—from one side of the Cordillera to the other. Wheelright's idea, to build a railway into the north of Argentina from the Chile side, still has its advocates and may yet find its contractors. Argentina itself would be glad to see a development of this character, because there is felt an urgent need of an outlet across the continent by railway toward the north. This feeling has become especially active recently, since the opening of the Panama Canal is so soon to be an accomplished fact, and since the changes that are sure to result therefrom must have an important influence upon the north of Chile and should be turned to the advantage of the north of Argentina. A railway branching off in the neighborhood of Jujuy to the west from the line already in operation (Central Norte Argentino) as far as the Bolivian frontier, and touching the Pacific coast in the neighborhood of Antofagasta or Copiapo, and thus carrying out the project of Wheelright, has already been surveyed. This meets the approval of the Government and of practical business men. The pass of San Francisco, through which it would connect the two Republics, is well adapted for the purpose, since it is protected from the excessive snows of higher passes.

But in the southern and newer parts of the continent the immense areas just coming into productive activity on both sides of the Cordillera must in some way or other be brought closer together by the railway. The passes are not formidable on account of their altitude, nor do they ever suffer from deep or excessive snows. It is certain that through one of them a commercial railway will sooner or later be built.

Two of these passes, in the neighborhood of which a railway must run, are already used for local traffic. One is westward from the town in the Argentine territory of Neuquen, called San Martin de los Andes, into Chile at about the latitude of Valdivia; the other is farther to the south, beginning at Bariloche, in the territory of Rio Negro, and entering Chile not far north of the city of Puerto Montt, the present southern terminus of the railway from Santiago. Both are beautiful and both are attracting tourists, but by no means in the proportion they should. For natural beauty and for climate they can be favorably compared with the Alps—in fact, this region is called the Argentine or the Chilean Alps—while as for the delight of out of doors, with fishing, hunting, tenting, or exploring, they are fully equal to the States of Washington and Oregon at the base of Mount Tacoma.

It was across the last-mentioned divide, from Bariloche, in Argentina, to Puerto Varas, in Chile, that I had the pleasure to travel in company with the governor of the Gobernacion of Neuquen. The purpose of his trip was to investigate the condition of the road and



SOUTHERN RAILWAY STATION AT BUENOS AIRES.

The Southern Argentine Railway, one of whose lines took the author from Buenos Aires to Bahia Blanca and thence to Newport, operates over 2,700 miles and owns the most extensive railway system in Argentina.

the country between the capital of his territory and Bariloche, and I had been asked to report upon the trip by the editor of *La Prensa*, of Buenos Aires, and by the secretary of the Touring Club Argentino.

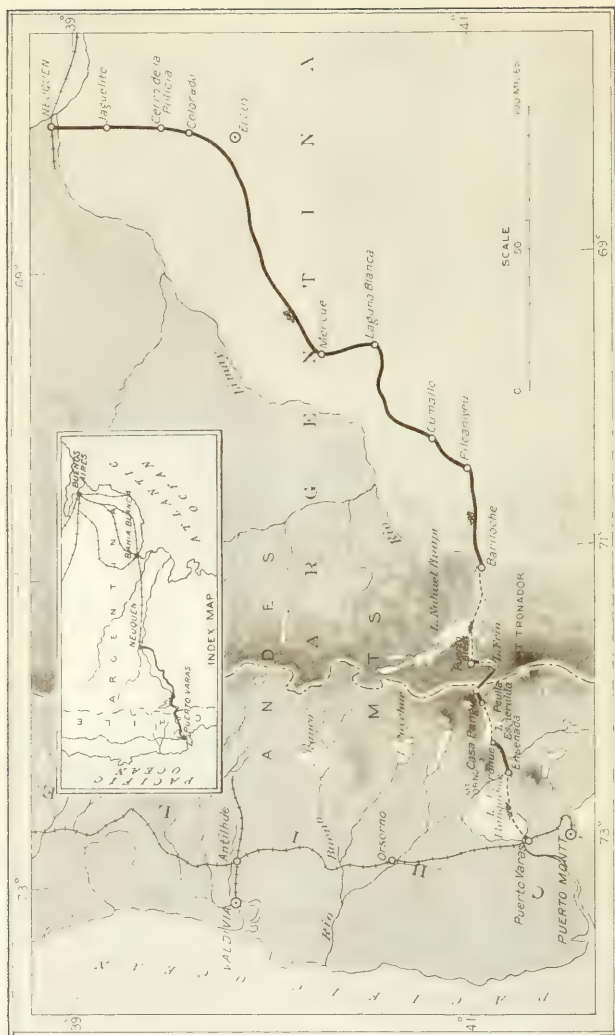
FROM BUENOS AIRES TO SANTIAGO VIA NEUQUEN AND BARILOCHE.

The train—*Ferrocarril del Sud*—carried me slowly out of the station on the Plaza Constitution on the evening of January 6, the exact time of departure being 6.38 p. m. I was on my way to Bahia Blanca but only to change cars at that interesting seaport for a farther journey westward through the Gobernacion of Neuquen. My purpose was to cross the Cordillera into Chile. I might, of course, have taken the easier way to Santiago by the B. A. P. and the Trans-Andino, but that route I already knew, and I wanted the pleasanter experience of an uncharted country, of escape from the railway, of actual touch with nature as she lay as yet undisturbed among her snowcapped mountains.

Moreover, I had an additional interest in this seldom-traveled route to Chile. I knew that serious study had been given it, both by the Government and by the railways, for ultimately this southern pass through the Cordillera must become a highway between the two great Republics on either side of the Andes, and I wished to find out what sort of country would then be opened for future colonization and settlement.

From Buenos Aires to Bahia Blanca the run is best made at night, across the fertile fields of the Provincia. What could be seen of the country, in the late afternoon and early morning, was not essentially different from the plains of Iowa and Minnesota, in my own native land. The sleeping car (*dormitorio*) and the restaurant car were excellent, and the comfort of travel was here as readily obtainable as anywhere in Europe. Bahia Blanca was reached at 9.25 in the morning, and the train, on the same *Ferrocarril del Sud*, to carry me to Neuquen, was waiting in the station. It left the city at 9.50 a. m. headed almost due west, and I was now in a new country, in a Territorio instead of a Provincia, and I felt that my experiences had begun in earnest.

In the first place, I was struck by the remarkable resemblance between the natural characteristics of the land in the Gobernacion de la Pampa, as well as of Neuquen, with those in western Texas, in Arizona, and in New Mexico in the United States of North America. Had I possessed the magic carpet of the old legend, I could have transported my fellow passengers into parts of Texas without their knowledge, and they would hardly have known that they had left Argentine soil. The wilderness without trees was the same; the illimitable distances were the same, and the small irregularities in the ground, not large enough to be called hills, but still elevated enough to break the



even line of the horizon, were the same. Even the dry, parched, and stony earth was the same, apparently sterile where there was no water immediately available, but touched with wonderful greens and made gay by multicolored blossoms, wherever the effect of water could be traced. The jarilla, a bush which must be the first cousin of our mesquite, so common in Texas and north Mexico, was everywhere, to make the resemblance more complete.

But I should like to state, for the encouragement of those who have had no opportunity to study these same corresponding areas in Argentina and in the United States of North America that the resemblance to a barren desert is only superficial. In the early geographies describing the United States of North America immense tracts of unknown land in our far West were marked as the great American Desert, impossible of habitation by man or beast. More than 20 years ago I passed over hundreds of miles in Texas and Arizona barren as Sahara. To-day the traveler finds much of this region blossoming into pasture for cattle, planted with trees, or cut up into relatively small farms where grains and vegetables are grown and orchards are planted. The entire explanation of the transformed landscape lies in the one word—water. Once introduce water onto this parched and thirsty soil, and millions of hectares will be redeemed from waste.

The problem may be locally different from what it has been and still is in the far West of the United States of North America, but it is fundamentally the same. With water trees can be made to grow; with trees water will finally come of itself and the soil will fructify. If I can judge from what was told me along the route, water is not so difficult to get. There are a few good-sized rivers from which it will be drawn, and in many places it is found only a few meters beneath the surface. Argentina, with her energy and her ambition, will solve the problem, just as we in the United States of North America are solving it, and I predict that within the lifetime of many of us La Pampa, Rio Negro, Neuquen, and Chubut will be subject to regular and effective irrigation, and that on these treeless plains thousands of settlers will find comfortable homes.

One more remark, a note of an ignorant traveler perhaps, who sees this newer part of the Republic for the first time, and may therefore be led into an error of judgment, and I shall return to my story of the race across the continent, or "al grano," as they say in Spanish. I missed along the railway, in contrast to what the traveler sees in parts of our own far West, the clusters of small houses around the stations, which indicate that immigration and town building have practically begun. This lack is not due altogether to the condition of the soil, because I had noticed the same absence of life in other and much more productive parts of the Republic along other railways, and because in some of the recesses of the hills beyond the immediate proximity



TAKING THE WOOL TO MARKET IN ARGENTINA

One of the greatest industries of the section of Argentina traversed is that of sheep raising. In the portion of Chubut near the Andes is found a magnificent grazing country, which has now something over 2,000,000 sheep and could easily sustain four times this number. In the Territory of Rio Negro there are now about 5,000,000 sheep, mostly of the Rambouillet type, which number will probably be trebled with increased advantages of transportation and other developments contemplated.



PACKING WATER IN THE RIO NEGRO TERRITORY

Agricultural and pastoral industries have been greatly retarded in the great Rio Negro Territory of Argentina, because of the scarcity of water. In places where irrigation has been tried the results have proven the remarkable fertility of the soil. Wells and windmills, with improved roads, will work wonders in the development of the country, and improved systems of irrigation will transform the arid wastes into blossoming gardens, green pastures, and vast fields of growing grain. The result of irrigation on a small scale in several places mentioned demonstrates the productiveness of the soil when sufficiently watered.

of the line were comparatively well-developed cattle ranges that must demand a population of some sort, which, among us, would stimulate in others the desire to settle in the neighborhood. No, I concluded, again perhaps in my ignorance (although I had the authority of others,



Courtesy of the Outlook Magazine

A GUANACO.

Among the game seen in the trip across the continent was the guanaco. This animal belongs to the *familia camelidæ*, genus *llamas*. The four varieties of this genus are the llama, alpaca, vicuña, and guanaco. The guanaco has not been domesticated as has the llama, and is found in the wild state from Peru down to Tierra del Fuego, being most abundant in the remote regions of Patagonia. An Argentine lieutenant once apostrophised the guanaco thus: "You are a queer animal, indeed. You have the neigh of a horse, the wool of a sheep, the neck of a camel, the feet of deer, and the swiftness of the devil."

benefit of the Nation and the railways, which gain by his presence.

Pondering on these fascinating problems of introducing new home-makers into the wilderness, I was carried across the Rio Neuquen into the Gobernacion and capital of the same name, and alighted at the station at 10.50 p. m., hot, tired, and dusty. My great wish is

natives of the country, who are well acquainted with Argentina), an explanation must be sought in the inability of the present land laws of the Republic to attract, with a guaranty of permanent occupation, the poor immigrant who comes to the country with the hope of finding and of making here a real home. The Government in the United States of North America has done nothing for the immigrant except to assure him, in a broad sense, immediate possession of his land and a legal title thereto. Recently, also, many of the railways themselves, for selfish but praiseworthy purposes, have felt obligated to encourage the settler by offering him land along their lines and by instituting their own departments of agriculture, through which the settler learns how to get the best profit out of his purchase. Otherwise nothing is done for his advantage; his own interest is his best stimulus, and as a rule, whether foreign or native, he succeeds, to the



CROSSING THE PAMPAS OF THE TERRITORY OF RIO NEGRO, ARGENTINA

The landscape is characteristic of the greater part of Rio Negro and Neuquén, stretching outward from the high plateau at the slope of the Cordillera de los Andes. The road is merely a track through the wilderness, and modern cars are rare.



A CATHOLIC OF ALBION IN EXILE

The true "gauchos" are fast disappearing from the plains of Argentina, as are the cowboys of the American West. The gaucho is a half-breed, half Indian, half Spanish, and his life is a life of wandering and hardship. He is a man of the plains, and he is a man of the saddle. He is a man of the open range, and he is a man of the closed range. He is a man of the great ranch owners, taking care of the immense herds and gradually being transformed into placid farm hands.

that petroleum may soon be discovered along the line of the Ferrocarril del Sud, so that they can oil the track, as is done in the State of Texas by the Southern Pacific Railway now that oil is so abundant in the neighborhood. I was met immediately on entering the hotel by the Governor of the Territory, Señor Eduardo Elordi. He said that he was on the point of starting from Neuquen the next morning for Bariloche to the southwest, and that if I so desired and was ready for the trip I might join him. I was only too glad to accept his kind invitation, and although it was then almost midnight, and we were to leave the city by sunrise, I promised to be on time.

Promptly at 5.30 a. m. Gov. Elordi called for me at the hotel. The machine—automobile—in which we were to make the experiment of crossing the wilderness, over unknown roads never before touched by a rubber tire, was a 40.50 horsepower car, 36 centimeters clear from axle to lowest edge of rim. It was capable of making probably 80 kilometers (50 miles) an hour, and was a good hill climber when put to the test. These points are important, as will be explained later. My baggage was carefully loaded into the car, the chauffeur was given orders to go ahead, now that all was ready, and we headed toward the south. The race had begun.

In this machine, besides Gov. Elordi and myself, were the chauffeur, another man, who was an able assistant as well as a good mechanic, and a cavalry soldier whose long experience on the frontier of both Neuquen and Rio Negro had made him perfectly familiar with the road on which we were to travel and who acted, therefore, as the guide when any question of direction or choice of road presented itself. We were sure on this account to lose no time in unfortunate divergences from the most direct way possible in the circumstances.

There have been outlined, under the inspiration of the Touring Club Argentino (see the *Guia General*, 1911-12, Tomo II, p. 486), two roads by which the Cordillera may be crossed and Chile entered from Neuquen. The first has been traveled by Señor Francisco M. César, secretary of the club, and Señor Eduardo Elordi, and their notes on the trip will always be of service to future tourists. This road goes almost exactly west from Neuquen, following the railway line in construction, and enters Chile at the Paso (Cajón) de Pino Hachado. The second goes more toward the south and aims at San Martín de los Andes, a distance of about 500 kilometers (311 miles) from Neuquen, which must be covered in an automobile, although, of course, the ordinary traffic of to-day is carried on with primitive oxcarts or on muleback. Both of these are within the territory of Neuquen. The third road was the one we were taking. It goes through the territory of Rio Negro almost exactly southwest to the town of Bariloche on the Lago Nahuel Huapi, the largest lake in Argentina.



GOVERNOR EDUARDO FLOREZ AN - INC. C/1

CROSSING THE RIO LIMA BETWEEN THE TERRITORIES OF NEUQUÉN AND
RIO NEGRO.

11. In the only bridge not negatively affected by the drought, just a few miles from the town, but notably near the city of Neuquén, there is a ferry for the convenience of commerce and tourists.



THE FIRST-ORDER CONDITION OF N. J. GUN

Less than an hour after leaving the capital we crossed the Rio Limay into Rio Negro by means of a simple ferryboat suspended from an iron cable stretched over the river, which was shuttled back and forth by the action of the current. Then we struck the hard and well-beaten road through the desert, barren as Arizona, but marked as a passage for oxcarts through the peculiar vegetation of a waterless plain. I can not refrain from again remarking the close resemblance to Arizona, Texas, or north Mexico. Yet I missed the various formations of the cactus that is universal in those regions: I do not know whether the cactus grows in Argentina, but I am sure that the soil is fitted for it, and Gov. Elordi told me that he had plans to introduce in Nuequen a thornless variety, which should thrive in this neighborhood and furnish good nourishment, for the mule especially, and probably for other cattle. By 9.15 a. m. we had reached (los) Jaguelitos, a "boliche,"¹ the first one on the road south of and distant 16 leagues from Neuquen. (A league in Argentina is equal to 5 kilometers, or 3.107 miles). Here we rested awhile and tasted the water from the well that offered the excuse for the erection of the house of the proprietor. As proof of a fact that is becoming better acknowledged in all regions of this nature, the soil, when watered from the well here, was quite fertile, and the proprietor was growing garden vegetables sufficient for his own needs.

The monotony of our journey through this section was frequently broken by the sight of game which would have aroused the interest of a North American sportsman. Several guanaco, the species of South American camel which is very closely related to the llama, were seen, while ostriches were quite numerous. Partridges and hares also abounded. The killing of ostriches is forbidden on many of the large estancias of Argentina, their feathers being a source of considerable revenue to the owners. These feathers are not as fine as those of the African ostrich and are chiefly used to make feather dusters.

Leaving Jaguelitos at 10 a. m., we gradually descended into a broad valley, the road giving practically no difficulty for the machine, so that it traveled easily at the rate of 6 leagues (18½ miles) an hour, and even more in places. We reached another "boliche"—not far from a curious hill at the end of the valley, called "El Cerro de la Policia"—at 11.30 a. m., and here we rested and took a comfortable breakfast, furnished by the owner. Again an instance of the productiveness of the soil, for this settler had discovered six years ago a spring of pure water on the side of the hill back of his house and had developed a practical system of irrigation for a garden around his home: in this he was growing luxuriously corn, onions, potatoes,

¹ A "boliche" is a small house in the country at which refreshment, chiefly liquid, and small supplies can be purchased by the traveler.



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MALE RHEA OR SOUTH AMERICAN OSTRICH

The male of the *Rhea* is a large, powerful bird, with a long neck and a small head. It is a native of South America, where it is found in the marshy regions. The male bird is much larger than the female, and its plumage is much more ornate. Sometimes the plumes of the African ostrich, used for ornamenting ladies' hats, are added to and built up by using portions of the rhea feathers. The poorer grades of ostrich feathers are often made up with rhea feathers. The male bird usually collects a harem of hens and each hen contributes her share to a common nest, which is often found to contain as many as 40 or 50 eggs. It is the male bird that sits and hatches the eggs. Although usually rather shy and easily frightened, the cock often shows great courage in protecting the young and will not hesitate to attack a man or horse in defense of the brood.

and similar vegetables, while his esthetic taste had led him to cultivate flowers, so that as we departed he gave us a handful of pinks (*claveles*), which preserved their freshness and fragrance even to the end of the following day.

It was hot in this valley, the thermometer registering 32° C. at midday, and no air was stirring; so we were glad to start shortly after 3 p. m. and catch the breeze created by the movement of the car. A good road past the "Cerro" brought us to another "boliche" named Colorado, within an hour, a distance of 7 leagues (not quite 22 miles). Here Gov. Elordi had had stored and ready for imme-



COURTESY OF MR. H. L. COLE, NATIONAL ZOOLOGICAL PARK.

THE RHEA, OR SOUTH AMERICAN OSTRICH

The *Rhea americana* closely resembles the African ostrich when seen at a distance. Upon closer inspection, however, it will be found that the *rhea* has three toes while the African bird has but two, and that the head and neck of the former are covered with feathers while those of the latter are bare. The general plumage of the cocks and hens is very much alike. They are usually nearly black on the top of the head, down the back, and in front of the breast; dirty white on the neck, belly, rump, and thighs. The wings and rest of the body are of either a rich brown or chestnut-brown, the latter

diately use a quantity of petrol (naphtha), for as the road had never been traveled before by an automobile, it was necessary to provide fuel along the way, in case of need. At Colorado we stopped only long enough to transfer the naphtha to the car and then hurried on through the valley (*cañadon*) called "Tricaco." At 6 p. m. some bad road was encountered in another valley, and the next two hours made slow going, but from 8 p. m., under a brilliantly starlit sky, we hurried on again, making the night's resting place—Meneue, a good-sized warehouse and store for the surrounding *estancias*—at 10.10



A. ROAD-IDEAL BUILDING, CHIRIQUÍ, PANAMA.

This is a small building, built by the Chiriquí Indians, and is used as a roadside structure, where travelers can stop for a short time, and where they can buy some of the local products.



THE STANDAL-ALONE BUILDING, CHIRIQUÍ, PANAMA.

This is a large building, built by the Chiriquí Indians, and is used as a roadside structure, where travelers can stop for a short time, and where they can buy some of the local products. It is situated across the plateau.



THE CASA DE NEGOCIOS, ALMENDRA, THE HIGHWAY STATION BETWEEN NEGUEN AND VILLALBA.

This is a substantial collection of houses, with a good-sized country store where almost everybody stops for a short time, and where they can buy some of the local products. It is up for the night, and those of the heavily burdened travelers, as well as the large carts, halt for the day, for many caravans prefer to rest when the sun is highest.

p. m., having covered this last interval, 22 leagues (68.35 miles), in 3 hours and 40 minutes. The entire distance traveled during this first day of the machine was therefore 55 leagues (171 miles), and by taking a short cut here and there, under the direction of the guide, we had saved about 5 leagues (15.53 miles) out of the 60 leagues (186.41 miles), the ordinary cart distance estimated by the natives.

Mencue is said to be the halfway station between Neuquen and Bariloche, but the longer half lay behind us, and according to the reports of those who knew the road, in reality the worst half. As we had a late supper the night after arrival, there was no great haste in the morning's start, so we did not leave the "casa de negocio" till 8.50 a. m. The night had been cold, and the morning air was fresh and invigorating, the thermometer registering 16° C. at 6 a. m. This is accounted for by the fact that the altitude, as recorded by my aneroid barometer, was close to 1,200 meters (3,937 feet), the highest point on the road. (This elevation varies only slightly from the more accurate calculation for Mencue, given us later by the chart at Bariloche.)

Leaving Mencue we found an excellent road to a "boliche" named Laguna Blanca, on account of a small lake near by, which dries up in the summer to expose its bed incrustated with a glistening white salt of some kind. The distance of 10 leagues (31 miles) was covered in 50 minutes. From Laguna Blanca to another little oasis in the wilderness called Cumallo is 14 leagues and required 2 hours and 45 minutes, our arrival being at 12.45 p. m. Here we had a stand-up breakfast, Gov. Elordi deciding to spend no time in resting, although the cottage was attractive and, with water from a hill at the rear, was shaded by a pretty grove of trees.

From Cumallo, which we left at 1 p. m., to Pileaniyen is 8 leagues (about 25 miles), and we arrived at 2.45 p. m. This place is quite a village, having a national (federal) school, a telegraph station, and a well-organized industrial plant, with modern machinery for sheep shearing. In all the valleys in this vicinity flocks of sheep are numerous, and the industry seems to thrive. Pileaniyen is the dividing line for the eastward traffic, because from this point all carts from the south strike directly eastward toward the end of the railway that begins on the Atlantic coast at Puerto San Antonio in Rio Negro, and great hopes are expressed that within a short time this railway will reach Pileaniyen and even be continued to Bariloche. North of Pileaniyen, most of the traffic goes to Neuquen, but as that is the nearest town of any importance on a railway having connection with Bahia Blanca and Buenos Aires, it furnishes most of the supplies needed in this entire region to the south.

Leaving Pileaniyen at 4.15 p. m., after a simple meal, we found many irregular spots in the road, due to the more frequent passage



LAGUNA BLANCA, THE NEXT TOWN PASSEJO.

At this point along the trail the pass of rocks is over more a single mountain range. The region is very dry, with only a few scattered trees. When the road is reached the ground is very dry and the sparse growth of thistles and grass.



AN OASIS IN THE HILLS AT CUMALLO, EN ROUTE TO BARILOCHE.

At this point, according to the guide, whenever you are tired of the hard and laborious journey, you can find a small oasis in the hills. Here you can find a small stream, a small and beautiful lake, and a small oasis of green grass and flowers.



THE ARGENTINE GOVERNMENT BUILDING, CUMALLO.

The upper story of this building is used by the Argentine Government as a schoolhouse and the lower story is used as a government building. The building is a very fine example of Argentine architecture.

over it of many carts, and also to the difference in the soil, which was more earthy and consequently these heavy carts made deeper ruts, with a high and awkward hump between them. These humps in the middle of the road caused many a delay and detour to avoid them, and progress was often slow on that account. About 5 p. m. we caught the first clear glimpse of the snow-capped Cordillera, and shortly afterwards, the beautiful saddlelike peaks of mighty *Tronador* rose before us. During the afternoon, too, we had noticed a better and greener landscape, more cattle (horses chiefly), richer valleys to right and left of the highway, and more frequent dwellings than had been visible the day before. A well-established civilization was coming into existence along the road. At 6.30 p. m. we entered the Rio *Nirihuao* (and here we remained for some time; but that is another story which had best be given by *Señor Elordi* if ever he seems inclined to tell his experiences), and at 11.30 p. m., over a splendid road which allowed us to travel, even in the slender illumination of the stars, at the rate of some 40 kilometers (25 miles) an hour, we entered the town of *Bariloche*, tired but victorious, for the hardest part of the trip lay behind us. We had made to-day just 50 leagues (155.34 miles).

In *Bariloche* we remained during the early hours of the day, partly to rest, partly to visit, and practically because nothing could be gained by attempting to hurry across *Lago Nahuel Huapi*, on which the town lies. The lake itself is beautiful, and deserved the hours we spent on it, as its shores are lined with pine-covered hills, and toward the west the snowy *Cordillera* is always in view.

But the steamer (specially engaged for the occasion) was ready for us at 4 p. m., and we then continued the trip to the farther end, arriving at the landing place of *Puerto Blest* at 9.30 that night.

Puerto Blest we left at 4 a. m. the next morning, traversing the short interval between *Lago Nahuel Huapi* and *Lago Fria*, only 4 kilometers (2½ miles) over a slight wooden-railed tram, in 40 minutes. Here is a good place to express our thanks to *Señor Carlos Boos*, who put the forces of the *Compañía Comercial y Ganadera Chile-Argentina* at our disposition; it was due to his active management of the details that we were able to cross the *Cordillera* with such celerity, and I am sure that *Señor Elordi* joins me in this open acknowledgment of *Señor Boos's* courtesy.

Lago Fria (not *Frio*, because the name does not indicate the temperature of the water but that of its early investigator) is a deep pocket in the mountains, with precipitous sides, allowing admittance only at the two ends where the company has placed landing stages. We were rowed across it in a small boat, a distance of 10 kilometers (6.21 miles), leaving one end at 4.50 and arriving at the other at 5.30 a. m. We left the little lake at 5.50 a. m., on mulkback to cross the divide

between the lakes and on the way to leave Argentina and to enter Chile, for we passed the boundary line at 6.45 a. m., 3 kilometers (1.86 miles) from Fria. A distance of 6 kilometers more brought us to Casa Pangué, on the edge of the Rio Peulla, up whose valley a splendid view of Tronador is obtainable. Then a wagon ride of 17 kilometers (10.56 miles) through a forest of pine and other timber, following the



AT PILCANIYEN.

The road, as described, meets the traffic from the south terminus, where the car crossed the railway which comes from the Atlantic port of San Antonio. Back of this house is a modern sheep-shearing plant where most of the work is done by machinery.



A HALT ON THE ROAD.

This is not an accident, but as the evening was approaching Gov. Elordi thought it best to put on a torch light show, and the crowd of thousands of people gathered to see it.

Rio Peulla all the way, brought us to the hotel at Peulla on the shores of the Lago Esmeralda, where we arrived for breakfast.

Leaving Peulla at 2.30 p. m. we steamed across Lago Esmeralda, 50 kilometers (31.06 miles), coming closer at every turn to beautiful Mount Osorno, which raises its snow-peaked cone above all the surrounding landscape, and landed at Petrohué at 4.30 p. m. Here



Photographed by Mr. Barlow Wells

THE TOWN OF BARILOCHE, ARGENTINE REPUBLIC.

Lying at the southeastern extremity of Lake Nahuel Huapi (in Argentina), Bariloche has a beautiful location, and a fine climate. There is considerable local industry and farming. Many of the settlers are Germans. Regular communication is maintained with Puerto Montt in Chile, and great effort is shown to open better roads toward the east.

horses were already waiting for us, and with only time for a cup of coffee we were away for Ensenada, 18 kilometers, at one end of Lago Llanquihue, the largest lake in Chile and second only to Titicaca in South America. We arrived at 7.15 p. m., took supper in the hotel at Ensenada, and left by steamer at 9 p. m. for Puerto Varas, 50 kilometers across the lake and the nearest station on the Central Railway of Chile, arriving at 12.30 a. m. (Argentine time, but before midnight Chile time).

From Puerto Varas there is only an afternoon train running no farther than to Osorno, about 58 miles. Through connection with Santiago has been established for some time, but the line to Varas, being recently opened, is at present only for local traffic, and consequently the traveler must spend the night at Osorno, and we had to go to a hotel to wait for the through train in the morning.

We left Osorno at 5.50 a. m., being lucky enough to find a sleeping car (*dormitorio*) to carry us all the way to Santiago. The day's journey was along the lovely central valley of Chile, and this night we spent in travel, as I had spent the first, although the intervening nights we had remained still. The train arrived on time, 7.30 a. m. in Santiago, and we hurried to the hotel in the city. The trip was at an end. I had left Buenos Aires Monday evening, January 6, and had arrived, across the Andes, after 2,125 kilometers (1,320 miles) of travel, on Tuesday morning, January 14.

Of the entire journey the passage of the Cordillera offers the most attractive features and a somewhat more detailed résumé of the most interesting may not be amiss.

Bariloche is a village in Argentina, from which cart roads with a simple commerce extend toward the north to San Martín de los Andes, toward the northeast to Neuquén, and toward the east to the present end of the railway coming westward from the Atlantic port of San Antonio. The completion of this railway will bring all this beautiful east Andean region into touch with the populous area of the Republic. A railway is building to the west and north from Neuquén, its ultimate destination being into Chile. In the neighborhood of Bariloche, however, great industrial progress is expected, while it offers attractive possibilities for the farmer, the rancher, and the lumberman. It lies on Lake Nahuel Huapi at an elevation of 740 meters (2,428 feet). The shores of this lake are thickly forested, and already some settlement has begun to make itself felt.

The narrow arm of Nahuel Huapi, up which the little steamer runs to reach the westernmost shelter, offers a wonderful stretch of scenery, comparable in many respects to a fiord of the Norway coast. In most places the sides fall sheer into the water from a height of hundreds of feet above. Old Indian remains are known to exist here, and it is a tradition that the Araucanians knew of the pass from the lake across



MOUNT OSORNO, CHILE

For its beautiful simple cone, its symmetry and a charm excelled by but few of the snow-capped peaks of the entire Andean range. It reminds the traveler of Mount Tacoma and of Fughyomer in Japan.



LAKE NAHUEL HUAPI, ARGENTINA.

The westernmost extremity of the lake is called Puerto Blest. Here the real pass across the Cordillera begins and the boundary between the two Republics is about 8 miles (13 kilometers) away. It can be seen that the shores of the lake are heavily wooded. Unfortunately fires in the dry season are either carelessly or intentionally started and cause much unnecessary destruction.

the Cordillera. Certainly the waters of the lake offer the only highway, because to get at the eastern shore in any other manner than through this arm demands a body and nerve racking detour through the wildness of pine forest that clothes those rocky eminences. Eternal snows cover the higher peaks of the inclosing mountains, while an occasional glimpse of *Tronador*—3,600 meters (11,811 feet)—can be caught to the southwest.

Laguna Fria is so still and shadowful in its deep mountain basin that even talking seems a desecration, and the rhythmic dip of the oar is the only sound expected or tolerated. It lies 10 meters (32.8 feet) above the Lake Nahuel Huapi, but its waters flow eastward, the watershed between the Atlantic and the Pacific, and consequently the boundary between Argentina and Chile, being round at an altitude of 1,050 meters (3,445 feet), 3 kilometers west of Lake Fria. From this "Cumbre," as the pass over the divide is called, the descent is rapid to the bed of the Rio Peulla, only 320 meters (1,050 feet) above the level of the sea. This river hurries on to the Pacific as if it bore the burden of all the snows of the Andes: its waters are therefore not navigable, but the good road along its shores, built through the woods, adds a change to travel. The snowy mountains are occasionally glimpsed through the trees, and at one place we passed not far from a pretty waterfall over the side of the cliff.

Lago Esmeralda receives the water from Rio Peulla. The lake itself is a considerable body of water. It differs noticeably from Nahuel Huapi, because the sides are usually less precipitous, while sandy shores and beaches are quite common. More settlement is discovered in the bays and sheltered spots. Great charm, however, is given it by the fact that two lofty cones of *Puntagundo* and *Osorno*—called "volcanes" in the Spanish, although there is little activity left in them—are now plainly visible. They present an interesting contrast, the one being, as its name implies, a sharp, tooklike projection into the blue sky, the other rising gently and very evenly from all sides into a smooth and well-rounded summit. There is an agreeable hotel on its shores, and the traveler can have many worse experiences than to pass a few hours or days in it.

A cheerful little steamer plies on Lake Esmeralda and takes about three hours and sometimes more to make the 50 kilometers (31.06 miles) to the port of Petrohue at the far western extremity. This landing place is directly against the slope of *Osorno*, and one feels that it would be fun to climb to the top and coast down its smooth and snowy sides into the pleasant waters of the lake beneath.

Petrohue, and therefore Lake Esmeralda, lies only 150 meters (492 feet) above sea level. To get around *Osorno*, however, and to reach the shores of the next and last lake, is a trip (on horseback or in a wagon, according to the taste of the traveler) of 18 kilometers (11



LAKE NAHUEL HUAPI, ARGENTINA, 2,428 FEET 770 METERS ABOVE SEA LEVEL

The shores of the lake are heavily wooded, chiefly with pine. Looking toward the west the snow-capped Cordillera are always in view. Where the shores of the lake permit it, that is, when the banks are not too steep, clearings have already begun and settlers' cottages peep out from among the trees.

miles). The road winds along at the foot of the mountain, its snow-capped peak constantly in view, and passes through a pine forest or hangs over the edge of the river connecting the two lakes. A gradual descent is noticed, and in fact the record shows that Lago Llanquihue is only 80 meters (262½ feet) above the sea. During the trip across the pass we have descended from 1,500 meters (4,921 feet) to 80 meters (262½ feet) and are now within the great valley running half the length of Chile.

Lake Llanquihue is more inhabited than the others. Many farms and occasionally a village are on its shores. It has long been the fresh-water resort of the German colonists who have contributed so much, by their energy and their thrift, to the development of this part of Chile. The lake is second only to Titicaca in size, and now that the railway has established through connections with Santiago and the rest of the Republic, its future is bright for both pleasure and industrial purposes. The harbor at the western extremity is called Puerto Varas, a prosperous village quite German in its construction and other characteristics. From Varas the mountains are seen toward the west. The Cordillera is behind the traveler and the passage is over.

To one accustomed to the luxury of European or American travel, the accommodations offered in this trip into the Andes of southern Chile might appear to lack much in the way of ease or comfort. But the comparison is unfair. The luxury is undoubtedly unobtainable, but the comforts are within reach of all. In the first place, there are good and trustworthy facilities for crossing the lakes, and for touring along the roads connecting these bodies of water. The lodgings, while small and simple, are clean and wholesome, and even ladies can be assured of good treatment in all cases. Perhaps to state that conditions here are about what they were in the Yellowstone Park 15 years ago would give a very warrantable picture of what can be expected to-day in southern Chile's Switzerland. To cross the Cordillera into Argentina should be a delight anticipated by those who have the time to wander into this part of South America. To continue eastward toward the Atlantic and Buenos Aires by this route is a trip that only the hardy and venturesome should undertake. Yet every year is removing difficulties and calling more sharply the attention to the great possibilities of this continent. It is worth noting, therefore, that such an interesting field has recently been opened for both pleasure and profit.



EIGHTY DAYS WITH THE "BLUECHER" PARTY

X.

BARBADOS, THE PANAMA CANAL, AND THE END OF THE JOURNEY.

EARLY on the morning of March 30 we anchored off Bridgetown, Barbados. This most eastward of the islands of the Lesser Antilles, sometimes called "Little England," lies in $13^{\circ} 4''$ north latitude, out in the Atlantic Ocean and directly in the path of the northeast trade winds. Its location is responsible for its most valuable asset—its climate. It is shaped something like a ham, is 21 miles long and about 14 miles wide at its larger end, and has an area of 166 square miles. It is of coral formation and has a shallow but rich soil, in which sugar cane and sea-island cotton as well as many tropical products thrive.

The exact date of its discovery is not known, but the date 1536 is usually taken as being approximately the time when some Portuguese adventurers landed there and gave it the name of "Los Barbados," from the bearded appearance of the moss-hung trees which they saw. The Kingdom of Portugal, if it knew anything of this discovery, seems not to have had any particular desire to annex the little island, and the next thing we learn of its history is that in 1605 the *Oliph Blossomet*, an English vessel which had been fitted out by Sir Oliph Leigh, anchored off the coast about where the village of Holetown is now located and took possession in the name of "James, King of England and of this island." Nothing came of this until some 20 years later when a wealthy English merchant, Sir William Courteen, heard a glowing account of the island, and under the protection of Lord Leigh fitted out an expedition, and in 1625 the *William and John*, commanded by Capt. John Powell, set out for Barbados with about 40 English colonists and some 6 or 8 negroes. They landed early in 1626 near the place where the sailors of the *Oliph Blossomet* had taken possession, and here they founded the colony of Jamestown. Capt. William Dean was appointed governor and Capt. Powell proceeded to Essequibo, in Guiana, where he procured seeds and plants of cassava, yams, Indian corn, sweet potatoes, plantains, oranges, limes, tobacco, cotton, etc., and returning to the little colony laid the foundation for the future agricultural wealth of Barbados. Thus was started "Little England," which boasts the distinction of being

(By Edward Albee, of Pan American Union staff.)



THE WORK OF WOMEN IN BRIDGETOWN, BARBADOS.

There is no "servant problem" in Barbados, as there is in the West Indies, and much less, and the supply exceeds the demand, so that there is no "servant problem" in Bridgetown.

the only British island in the West Indies over which no other conquering banner has waved.

When we landed we had abundant evidence that we were again on British soil, for on every hand the language we heard was English as "she is spoke" in the mother country, and even "cockney" English from the lips of the hundreds of negroes about us sounded more natural to the man from "Dixie" than had the Portuguese of the negroes of Brazil. The population of Barbados is given as 194,498, or 1,170 to the square mile, less than one-tenth thereof being white. Bridgetown has about 30,000 and judging from the dense crowds on the streets the proportion of whites to blacks is even less in the city than in the remainder of the island. These streets are distressingly narrow, the sidewalks being barely wide enough for two persons to pass one another, so that in the shopping districts pedestrians take up the entire streets and then have difficulty in getting along. To the visitors from our northern States the endless streams of negroes, most of whom were women, varying in color from deep black to shades of light yellow, presented an interesting study.

Burdens of every description are carried on the heads of these women, who are adepts at feats of balancing. Vendors of fruits, merchandise, curios, tinware, and even live fowls and pigs, carry these wares on their heads. Even the dispensers of soft drinks carry the jars thus and fill the cups of the thirsty buyers by skillfully tipping the jars without taking them from their heads.

One fact which strikes the visitor immediately upon landing is that the negro women greatly outnumber the men. This is probably due to the low scale of wages which obtains on the island. The average daily wage for an adult laborer, so we were told, is 25 cents, while the women are paid from 12 to 25 cents. The result has been that many of the most industrious of the male population have gone to Panama, where they form quite a large per cent of the workers on the canal. Thus thousands of dollars from the coffers of Uncle Sam find their way to "Little England" every month, for the Barbadian negro is said to be a steady, sober, and industrious worker and sends the proceeds of his labor back home to his dusky family. Many of the policemen of Bridgetown are black, and these are of the elect, for they are paid \$16 per month and are furnished their uniforms.

Along the docks several vessels were coaling, and the loading was being done by women. The coal was carried in great baskets on the heads of these sturdy, begrimed, thinly clad, and perspiring Amazons. Their teeth and the whites of their eyes were the only relieving features of the sooty blackness of their skins and scanty clothing. The sight of women being compelled to labor as coal heavers for their subsistence in this hot climate was not very pleasant to one who had so often heard the negro women of the Southern



IN VICTORIAN SQUARE, BRIDGETOWN, BARBADOS.

The photograph is a reproduction of the original in the collection of the Barbados Museum. It is a historical record of the grateful recognition by the Barbadian people of the service rendered them by Lord Nelson in crossing the Atlantic Ocean to come to their rescue in 1805. In the background may be seen the "Stars and Stripes" floating over the American Consulate.

States singing and crooning their soft melodies as they skillfully picked the snowy staple from the long rows of green-leaved cotton stalks, earning from \$1.50 to \$2, and sometimes even more, per day during the "cotton pickin'" season, when they do their hardest work. The women coal heavers of Bridgetown were not singing as they strained at the heavy baskets to lift them to their heads and trudged wearily over the gangplanks to empty them into the holds of the vessels for wages of about 15 cents per day. Fortunately, the climate is such that shoes and stockings are luxuries and not necessities, and a single cotton garment is enough to observe Barbadian propriety as to clothing.

To the left of the landing place, and the first attractive feature to claim the attention of the visitor, is Trafalgar Square. It is sometimes called the "Green," but upon the occasion of our visit it presented a rather parched and yellowed sort of green when compared with the parks of magnificent tropical verdure we had seen in Brazil. In the center of the little square is the bronze statue of Nelson, the hero of Trafalgar. It is claimed that this is the first statue that was erected in honor of England's greatest naval hero, and the reason for its existence here is that Nelson was the preserver of the West Indian possessions of Great Britain in 1805.

England was at war with both France and Spain at this time, and Lord Nelson had been placed in command of the British Mediterranean fleet. Admiral Villeneuve, the commander of the French fleet, had been joined at Cadiz by Admiral Gravina with his Spanish squadron, and the combined fleets set sail for the West Indies to capture the British colonies. They arrived at Martinique on May 14, 1805, just a week before Nelson, who, suspecting their plan, started in pursuit. The British fleet arrived at Barbados on June 4, and from there started on the trail of the enemy. Villeneuve had done but little damage, having captured a small English garrison at Diamond Rock, at the south of Martinique, and, doubtless hearing of Nelson's presence with a superior force, hied him back across the Atlantic with Nelson in pursuit. Thus the shrewd guess of the British admiral as to the destination of the French and Spanish fleets had saved the colonies, and he was justly hailed as the deliverer of the British West Indies. His great victory over the combined fleets of Spain and France off Trafalgar on October 21, 1805, when he was killed in the hour of his triumph, was not known in Barbados until the following December. Immediately a popular subscription was started, and something over \$11,000 was raised by the grateful Barbadians to erect this first monument to their preserver. The following is the inscription on the pedestal:

To the Memory of
His Excellency Vice Admiral Sir George Beckwith, K. B.,
 Vice Admiral of the White,
 The Preserver of the British West Indies
 In a period of exceptional peril
 The Hero, whose various and transcendent merits,
 Alike, conspicuous in address, decision, action and achievement
 Throughout his whole unparalleled career of glory,
 No powers of language can sufficiently delineate,
 THIS STATUE
 Was erected by
 The grateful inhabitants of Barbados,
 On a spot of ground appropriated to it
 By a public Act of
 The Colonial Legislature.
 In accordance with the solicitations of a select Committee,
 That so sincere though humble a tribute
 Of esteem, admiration, and gratitude to their
 Illustrious Deliverer
 Might be rendered more congenial
 To his generous and exalted spirit,
 From the hand of one,
 Himself a Hero and a Benefactor to this country,
 The first stone of the Pedestal was deposited by
 His Excellency Lieutenant-General *Sir George Beckwith, K. B.,*
 The Beloved and Patriotic Governor of Barbados,
 And Commander of the Forces in the Leeward Islands
 February 24, A. D. 1814.
Esto Perpetua!

On the other side of the square opposite the landing are the public buildings, a group built of coral rock, in which are located the council and assembly rooms in one wing, while the governor's office, post office, and the departmental offices are in the other. The windows of the council and assembly rooms are of stained glass and contain the pictures of the sovereigns of Great Britain from James I to Victoria.

East of the public buildings stands the Anglican cathedral, St. Michael's, also built of coral rock. The first cathedral was blown down by the great hurricane of 1780, and the present one was erected in its place by means of funds derived from the operation of a lottery sanctioned by the legislature. A more or less legendary story has it that the organ in the church was being conveyed in a French ship, being intended for a certain Roman Catholic church, when the redoubtable Lord Nelson captured the vessel and either gave or sold the organ to St. Michael's.

Not far from here we saw two buildings which reminded us very much of home. One was the new Salvation Army Building, a large substantial edifice of coral rock, which bore eloquent testimony to the energy and usefulness of this institution, and the other was a typical Carnegie library. The benefactions of this greatest of world



Photograph by Underwood & Underwood

MOTIVE POWER IN BARBADOS.

Most of the sugar plantations are equipped with windmills which furnish the power for the sugar mills and cotton gins of the island, and add materially to the picturesqueness of the views.

philanthropists seem thus to extend even to the islands of the seas, and when he saw the well-known inscription the writer's thoughts involuntarily drifted back to the little city, "way down South in Dixie," which he still calls "home." There, too, may be seen, on a beautiful wide street, an artistic little building of brick and stone whose contents are a boon to hundreds of hard-working men, women, and children, too poor to buy expensive books and yet longing for the knowledge, culture and refinement to be gained from the reading and study of good literature. And over its wide portal, open to rich and poor alike, stands that same inscription "Carnegie Library."

The corner stone of the building in Bridgetown was laid in 1904 and the library opened to the public in 1906. It is said to contain about 25,000 well-selected volumes, and is maintained by an annual grant of the Government of £700. Besides the reading rooms and library the building contains a commodious lecture hall, which is used for various public functions and entertainments.

Bridgetown has one institution which is unique and which deserves the patronage of every visiting tourist. As you leave the landing, on the far side of Trafalgar Square, you come to the headquarters of the Women's Self-Help Association, an organization which enables many needy women and children to maintain themselves and families. In the salesroom of the association may be found picture postals, photographs, curios, Indian pottery, lace, embroidery and fancy needlework, homemade jellies, cakes, pies, light lunches, delicious ices, etc., and all at remarkably low prices. The association was started in 1907 and is maintained by the ladies of Barbados, and is a splendid example of practical benevolence.

One place of especial interest to the tourist from the United States is a large house called "Wilton," located on the corner of Bay Street and Chelsea Road. It is said to be the house in which George Washington lived with his half brother, Lawrence, in 1751. Lawrence Washington, who was 14 years older than George, had served in 1741 as a captain under Gen. Wentworth in an expedition in which Admiral Vernon was in command of the naval forces, and which was disastrously repulsed at Cartagena. Thousands of British soldiers and sailors died from yellow fever and other tropical diseases, and it was in this campaign that Lawrence Washington contracted consumption. With the hope of restoring his health he went to Barbados, taking with him as a companion his 19-year-old half brother. While sojourning there George Washington contracted smallpox, fortunately not in a virulent form. Lawrence Washington died in the following year and left the magnificent estate of Mount Vernon as a legacy to his brother George. The visit to Barbados is said to be the only instance in which George Washington left the United States.



Photograph by Underwood & Underwood

SUGAR PLANTATIONS OF BARBADOS VIEWED FROM GUN HILL.

Gun Hill is located about 6 miles from Bridgetown, in the parish of St. George. It has an elevation of about 730 feet and affords a splendid view of the country and the large sugar estates in five of the parishes of the island. The "British Lion" in the foreground was sculptured by a Colonel Wilkinson and some of his brother officers while they were encamped on the spot in 1808.

Another place of interest visited by some of the Bluecher party is St. John's Church, in the parish of St. John, about 14 miles from Bridgetown. The church is built a short distance from the edge of a cliff some 824 feet high, from which elevation a fine view of the Windward coast may be had. The special attraction for the sightseer, however, is not so much the church as it is a small tomb in the churchyard. This is the last resting place of Ferdinando Paleologus, the last descendant of the Greek Christian Emperors of that name, who were



Photo by Underwood & Underwood.

WHERE WASHINGTON LIVED IN BARBADOS.

This is said to be the mansion at which George Washington and his wife, together with their children, resided at Barbados in 1793. It is reported that on their return to the States they took with them a cow and a horse, which they sold to the servants.

driven from Constantinople by the Turks in 1453. The presence of the remains of this descendant of a line of emperors is thus accounted for by Mr. Algernon E. Aspinall, author of an excellent historical work recently published, *The British West Indies*, and also of a very useful and reliable *Pocket Guide to the West Indies*, from which the following is taken:

He, Ferdinando Paleologus, was the son of Theodoro Paleologus, who was buried at Blandulph in Cornwall by his wife, Mary Balls, and he was successively vestryman,



Photograph by Underwood & Underwood.

TOMB OF FERDINANDO PALEOLOGUS, BARBADOS.

By the phrase "Ye last Christian Emperors of Greece" in the inscription is meant the last Emperors of the Eastern Roman Empire. It will be remembered that Constantine the Great established the second Capital of the Roman Empire at Byzantium (Constantinople) and that subsequently the Empire was divided into the Eastern and Western Roman Empires. The Palæologus dynasty, which was Byzantine in origin, reigned in Constantinople from 1259 to its fall in 1453.

sidesman, church warden, and trustee of St. John's Chapel, in the seventeenth century. The tradition of the death and burial of a Greek prince from Cornwall was for many years current in Barbados; and when the Church of St. John was destroyed by the hurricane of 1831, the coffin of Ferdinando Paleologus was discovered in the vault of Sir Peter Colleton under the organ loft. The remains were reinterred in a vault belonging to Josiah Heath, Esq., in 1906, and a memorial stone was erected by public subscription to mark the place where they now rest. The memorial, made of Portland stone, represents the porch of a Greek temple, with Doric columns, and with the cross of Constantine in the center. It bears an inscription,¹ the wording of which was borrowed as far as possible from the monument of Theodore Paleologus in Llandulph Church, Cornwall.

Formerly Great Britain maintained a garrison in Barbados. Upon the withdrawal of the troops in 1905, Queen's House, the official residence of the commanding officer, was purchased by the local government and the grounds were laid out and now form Queen's Park, one of the most popular breathing places for Bridgetown, while the savanna, once the parade ground for the soldiers, has been turned into an athletic field.

On the opposite side of the island, about 15 miles from Bridgetown, is located the oldest university college in the West Indies. It was founded by Christopher Codrington, governor general of the Leeward Islands, who died in 1710, leaving his two large estates to the Society for the Propagation of the Gospel, with instructions for the establishment of a college. The grounds of Codrington College are well laid out, and with the lake in front of the buildings fringed with tall cabbage palms, and long avenues of palms and shade trees, present a most pleasing appearance.

Our short stay precluded our visiting many of the places of historic interest in which the little island abounds, and which serve to while away pleasant hours for those who come here to rest and to avoid the cold winters of our northern countries. The climate of Barbados is said to be ideal and the most healthful of any of the islands of the West Indies. The temperature varies from 75° F. to 83° F. in the daytime, while during the coldest season it gets down as low as 63° F. at night. Being situated in the path of the trade winds the constant sea breeze prevents the heat from becoming oppressive at any time. The rainy season begins in June and lasts through October.

The principal exports of Barbados are sugar, molasses, and cotton. An average crop of sugar cane, we were told, produces about 50,000 tons of sugar and 40,000 puncheons of molasses, the two items being worth probably \$2,500,000. The crop of sea-island cotton generally does not exceed \$300,000 in value. Windmills form the motive power for most of the antiquated sugar mills and cotton gins, and the number and style of these structures remind one of Holland. As a winter resort Barbados is very likely an ideal place. The cost of living is reduced to a minimum and everything that is a necessity is cheap.

Our last amusement in the harbor of Bridgetown was watching the negro divers who had crowded about the *Blucher* from the time of our arrival. A perfect fleet of "skiffs" and little plank canoes were clustered on both sides of the vessel and men and boys, clad only in breechcloths, fought for points of vantage to dive for the little silver coins the tourists tossed into the clear water. It seemed to require no greater effort for these expert swimmers to stand in the water than to stand on land. They never tired and never did they miss a coin thrown down, even though a half dozen or more would dive for the same piece and struggle good-naturedly with one another deep under the water for it. Some of these divers were tall, finely formed, able-bodied men whom one would expect to find employed in some useful occupation. For these, however, diving for sixpence or United States dimes and perhaps an occasional "bob" or quarter was probably more profitable than hard labor at 25 cents per day.

A delightful journey of three days in which we plowed our peaceful way through the erstwhile turbulent and more or less notorious Spanish main, brought us to the last foreign port we were to see on our 20,000-mile jaunt. Colon was reached early on the morning of April 3, and once more we found a place where the *Blucher* could steam up to a pier and unload us without the aid of lifeboats. Also, we heard United States English, and not far away fluttered the Stars and Stripes over its own—the Panama Canal.

A special train awaited us at the station at Colon to take us over the Isthmus to the city of Panama, with a few stops along the route to give us a glance at the Gatun Locks, the tremendous gates, the dam, the lake whose waters were soon to rise and cover the ground we now saw dry, the Culebra Cut in which the enormous steam shovels were at work nibbling from 1 to 5 cubic yards of dirt and rock out of the banks at each bite, and all the many and varied scenes of prodigious activity going on along the entire way.

To give an account of the tremendous work being done by this army of 40,000 or more men under the direction of Col. Goethals and his assistant engineers in bringing into actual being this "dream of the centuries," this cutting through of a ligament of land heretofore uniting two great continents and linking together by a narrow ribbon of water the two great oceans of the world, is a task beyond the scope of this article and beyond the powers of this writer. We caught but a passing glimpse, but to adequately describe even the little we saw would take a volume. And volumes have been written, and will continue to be written, anent all the phases of this greatest of all engineering feats, and any information desired is so very accessible in fact, can hardly be dodged by readers of magazines and Sunday supplements—that there seems to be no urgent necessity for this writer to add his little mite to the already plethoric literary contribu-



IMAGINARY AERIAL VIEW OF THE PANAMA CANAL

THE PANAMA CANAL, A GREAT ENGINEERING FEAT, HAS BEEN THE RESULT OF THE
 LABOR AND SACRIFICE OF MANY MEN. IT HAS BEEN THE WORK OF THE
 UNITED STATES GOVERNMENT, AND THE PANAMA CANAL ZONE IS A TERRITORY
 BELONGING TO THE UNITED STATES. HERE THE CIRCUMSTANCE OF THE SUN RISING OUT OF THE PACIFIC AND SETTING IN THE ATLANTIC, ALLUDED TO IN THE TEXT.



ILLUSTRATING AMOUNT OF TOTAL EXCAVATION ON CANAL.

A railway tunnel, 14 feet in diameter, dug straight through the center of the earth at the Equator, could be completely filled with the rock and earth taken out of the Panama Canal.

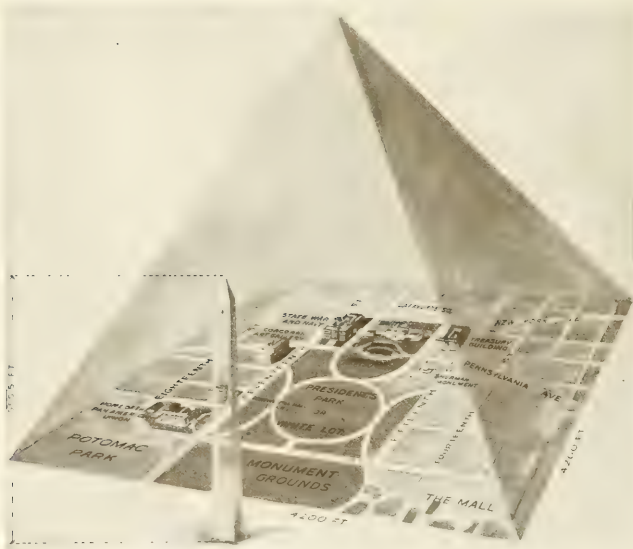


DIAGRAM ILLUSTRATING AMOUNT OF TOTAL EXCAVATION ON CANAL.

The 242,000,000 cubic yards of excavation taken out of the "Big Ditch" would build a pyramid whose base would be 4,200 feet square and whose altitude would be twice that of the Washington Monument.

tion box of the canal. Hence, there will be only a few paragraphs of simple facts, devoid of hair-raising statistics and astounding figures, before we safely dock the *Blucher* in "little old New York."

The canal, from the deep water of the Atlantic to the deep water of the Pacific, is about 50 miles long, although the distance from shore to shore is not over 40. Colon, the Atlantic port, is about 20 miles farther west than is Panama, the Pacific end of the canal. The Isthmus runs east and west, Colon being on the northern shore and Panama on the southern. The canal, including the channel in Limon Bay, runs straight south until it reaches a point in Gatun Lake about 3 miles beyond the Gatun Locks, when it turns almost directly south-east, a direction which is then maintained practically all the way to the deep water of the bay of Panama, with the exception of several turns and changes in the direction of the channel made necessary by an island in the lake and the course of the Chagres River, until Bas Obispo, at the entrance of the Culebra Cut, is reached.

It is the situation of the two termini of the canal which turns some things rather topsy-turvy in the visitor's mental conception of the eternal fitness of things, if he hails from the United States. If he spends the night in the city of Panama and wakes up in time the next morning, he sees the sun rising, quite orderly and sedately, *out of the Pacific Ocean*. This of itself is something of a staggerer to the man who is accustomed to thinking of the Pacific as being out beyond California, some several thousand miles west of his own habitat, where the sun, ever since he can remember, has had the habit of setting. He doesn't quite grasp the thing, even when explained to him, but goes on over to Colon by the afternoon train to spend the evening and night. There, late in the afternoon, he watches the same sun as it slowly approaches the horizon, its declining rays painting gorgeous pictures of rolling sea and fleecy clouds in a sky of deepest blue, until it sinks, a great golden ball, *into the Atlantic*. Then he probably hunts up something to steady his nerves. When the sun gets to performing stunts like these it is likely to upset any man's equanimity. It muddles up all his previously formed ideas of direction, and when in the course of conversation he wants to indicate his home, or the United States in general, he fatuously points toward the South Pole, while an allusion to Cape Horn or the Strait of Magellan brings a cheerful nod toward Canada. Fortunately he still retains a tolerably correct idea of which is up and which is down, otherwise he might be found walking about on his hands. But we were speaking of the Panama Canal.

When it is all done, and you decide to take a delightful trip to the west coast of South America, your ship will sail from the north directly south into Limon Bay, past a great rock and concrete breakwater, which extends far out into the sea, with a lighthouse at its extreme tip; past Colon, if you are not billed to stop at that quaint and his-



BIRD'S-EYE VIEW OF PEDRO MIGUEL LOCK AND APPROACHES.

In passing from the Atlantic to the Pacific, after having been raised 85 feet to the level of Gatun Lake by the three locks at Gatun, a vessel will cross the lake, pass through the Culebra Cut, and enter the Pedro Miguel Lock, which will lower it 20 feet to the level of Miraflores Lake. After crossing this lake the two Miraflores Locks will lower it 54 feet to the level of the Pacific Ocean.

toric little city; along a channel which has been dredged out of the bottom of the bay, some 500 feet wide, and of which you will be entirely unconscious, until you enter the canal itself and come to the Gatun Locks, about 7 miles from the lighthouse passed at the entrance. These three locks at Gatun will gradually lift your vessel 85 feet to the level of Gatun Lake, the ship being drawn through the locks by teams of powerful electric locomotives. Upon leaving the last lock it will proceed under its own steam for about 24 miles, when it will enter the famous—or infamous—Culebra Cut, through which the canal, having now a bottom width of about 300 feet, takes it to the Pedro Miguel Lock. This lock will lower the ship 30 feet to the level of Miraflores Lake, over which it will steam for a mile and a half to the Miraflores Locks. It is still 54 feet above the level of the Pacific Ocean when it arrives here, so these last locks lower it gently to the last channel, which is about $8\frac{1}{2}$ miles long and extends out into the deep water of the Bay of Panama, an inlet of the Pacific. The entire trip from ocean to ocean is estimated to consume from 10 to 12 hours. Three hours of this time will be consumed in being lifted through the Gatun Locks and lowered through those of Pedro Miguel and Miraflores.

Aside from the tremendous masonry of the locks and the stupendous work of the Gatun Dam and Culebra Cut, the fact which struck the writer most forcibly is the evidence on every hand of the wonderful human foresight evinced by the engineers who are directing the work. Every possible contingency which could interfere with the safety or the efficiency of the canal seems to have been provided for. As an instance of this may be mentioned the enormous locks and the inclosing gates.

The locks, built of concrete, are each 1,000 feet long and 110 feet wide in the clear, and are built in parallel sets. At Gatun, for instance, there are two sets of three locks each, or six locks. Should anything happen to one set, a duplicate set is there to do the work. Meanwhile both sets may be in operation at the same time, one set raising a vessel coming in from the Atlantic while the other set is lowering one coming in from the Pacific side. The side walls of these locks are 81 feet high, 45 to 50 feet wide at the floor level, and decrease to 8 feet at the top. The middle wall, dividing the two sets of locks, is 60 feet wide. The water from Gatun Lake is let into the locks by means of a great culvert, 18 to 22 feet in diameter, which extends the length of the center wall, and similar, somewhat smaller culverts in each of the lateral walls, these in turn being tapped by lateral culverts which run under the floors of the locks, and these in turn by still smaller openings or wells into the inside of the locks themselves. Thus each lock can be filled quickly and yet without any destructive rush of water to damage the vessel floating therein. When both a

center and a lateral culvert are used a lock can be filled in 7 minutes and 51 seconds. By means of huge valves the water from an upper lock is used to fill a lower to establish the common level.

The gates, the closing of which makes a water-tight compartment of each lock, are enormous affairs. The individual leaves of each gate in the first, or lower, lock are 79 feet high, 7 feet thick, and 65 feet long, and are made of structural steel. Two sets of these gates separate the higher and lower levels, so that if one set should be damaged by some accident, the other set is there to hold the water. When the gates are closed, as an additional precaution a huge chain drops in front of them, a chain strong enough to stop a 10,000-ton vessel moving at the rate of 5 miles an hour. To make assurance doubly sure, however, the locks are provided with emergency dams, consisting of swing bridges which can be drawn across the locks.

No description can give an idea of the solidity and immensity of these locks. To the writer it seemed that but one natural catastrophe could destroy them, and that is the subsidence of the solid earth on which they are built.

The Gatun Dam, by means of which Gatun Lake has been formed, extends from the locks across a valley to a range of hills on the west. This dam is simply an enormous artificial hill which has been dumped across the course of the Chagres River, causing the water to back up and form a lake some 32 miles wide. This small mountain of earth and rock, once part of the hills through which Culebra Cut now passes, is $1\frac{1}{2}$ miles long, about 2,100 feet wide at its base, 400 feet wide at the water level, and 100 feet across its top, which is 115 feet above the level of the sea and 30 feet above the level of Gatun Lake. The level of the lake will be maintained by a great spillway through which the surplus water will be permitted to escape to Limon Bay, not before doing some work, however. This immense waterfall will run the great turbines of the power plant which will furnish the electricity for the enormous power needed to control the gates of the locks, the locomotives, and all the power and light needed on the canal. When the gates of the spillway are fully opened, 140,000 cubic feet of water may escape every second.

Gatun Lake, whose water is supplied by the Chagres River, will have an area of about 164 square miles and will contain over 206,000,000,000 cubic feet of water. It is estimated that there will be water enough, even during the driest season, to permit the passage of 40 vessels per day, even when the full length of the locks are used. Hence no scarcity of water need be feared.

The Culebra Cut presented the interesting sight of a mountain being moved, not by faith, but by dynamite and drills, steam shovels, and dirt trains. The immense quantity of rock and earth which has been removed between Gold Hill on one side and Culebra Hill on the other, resulting in a tremendous gorge or canyon through which ves-



CULLEBA CREEK SHOWING POINT OF DEEPEST INCANADATION

On the right is the right bank of the creek. The white line shows the 200-foot contour line, and the 200-foot contour line is shown on the right.

sels will steam on their way from one ocean to the other, is almost beyond mental grasp. One hundred and six million cubic yards of the original earth and rock have been excavated and hauled away to build up the Gatun Dam and other portions of the canal works. This is about half of the total excavation for the canal, and does not include the several million yards of material which the infamous "slides," of which we have read so much, have persisted in dumping back into the cut and which have had to be removed. When the canal is completed, the total amount of excavation will be about 242,000,000 cubic yards, or about the same amount of material which would have to be taken out of a tunnel between 13 and 14 feet in diameter extending straight through the center of the earth at its greatest circumference, the equator. To watch one of the huge steam shovels dip down and scoop up with its great steel teeth 5 cubic yards, or from 7 to 9 tons, of earth and rock at one bite and deposit it on a dump car, makes quite an impression on the visitor who sees these wonderful machines for the first time. It shows just how the accomplishment of the gigantic task has been made possible.

Our party had consumed so much time in the inspection of the locks and dam at Gatun and watching the work in the Culebra Cut that other stops along the line had to be abandoned and we proceeded through to Panama in order to arrive in time for lunch. We sat down to a splendid meal at the Tivoli Hotel and then were given a couple of hours to see the city of Panama. A carriage drive through the older portion of the city, with its quaint and narrow streets and picturesque houses, took some of us over to Balboa, the Pacific end of the canal. Here the scene in the freight sheds and docks, where goods were being transferred from the cars of the Panama Railway Co. to the Pacific steamers, gave us some idea of the enormous traffic carried on even under present conditions. Hundreds of men were hurriedly rolling trucks loaded with boxes, barrels, and bales from cars to ships, or vice versa, while great cranes were lifting the heavier cargo. At the present time some 700 vessels land their thousands of tons of freight at Colon for transshipment to the Pacific steamers every year. How many more will make use of the canal, with its tremendous saving in time and distance is a matter which can not easily be foretold. The net tonnage of the Suez Canal for 1911 was 18,000,000. Prof. Emory R. Johnson, special commissioner on Panama traffic and tolls, estimates that no less than 10,500,000 tons will pass through the new waterway in 1915 and 1916, averaging perhaps seven ships per day for the first two years, with the likelihood of a tremendous increase thereafter.

Our brief stay in the city enabled us to see but very few places of interest. The Plaza Independencia, with its tropical trees and plants, is a picturesque little square surrounded by some interesting buildings. Among these is the old cathedral, with its glittering



NO. 1. SAM'S INDUSTRIAL ARMY ON THE CANAL

FIG. 10

A. C. L. & C. L. & C. L.

INDUSTRIAL ARMY ON THE CANAL

INDUSTRIAL ARMY

towers and highly gilded interior: the new municipal building, which is a modern stone structure presenting quite an imposing appearance: the lottery office, and the Hotel Central. Not far from here, and overlooking the Bay of Panama, is the residence of the President of the Republic, as are also the national palace or Government building and the fine new National Theater. The queer little foreign-looking shops attracted many of the souvenir fiends of our party and United States coin being the medium of exchange mostly desired by the merchants they had no trouble in getting rid of as much as they desired to spend. One large store in which were found great quantities of Chinese silks and other importations, was constantly crowded with the ladies of the *Blucher* party, who were having a delightful time bargaining with the Chinese proprietors and clerks. All manner of jewelry, curios, dainty laces and embroideries were on sale here, and at astonishingly low prices.

For its size the city of Panama has the world beaten for variety of population. It is cosmopolitan and picturesque, and adventurers from every land under the sun seem to congregate there. Every language, from Greek to the British-English dialect of the Barbadian and Jamaican negro, can be heard on the streets and Caucasian mingles freely with Mongolian, Malay, Indian aborigines, and the dusky sons of Ethiopia.

No time was lost on our return trip to Colon. The train whizzed past the stations and we caught but glimpses of the screened, neat little cottages in which dwell the units of the great industrial army in Uncle Sam's employ. The houses are built above the ground to give ventilation and to prevent the accumulation of filth. All porches, windows, and doors are screened, though the malaria and yellow fever carrying mosquito is a *rara avis* in Panama since the advent of Col. Gorgas. As a health resort the Canal Zone rivals the most salubrious of our mountain villages, and all because science and determination, backed up by the power of the United States Government, has enforced sanitation and made war on the mosquitoes and other insects.

No time was given us at Colon for sightseeing, the *Blucher's* hoarse blasts warning us to get aboard as soon as our train arrived. Two or three of our good friends left us here to catch a steamer for New Orleans, and thus save a day or two in returning to their western homes. We were due in New York on the morning of April 9, and but six days remained of a voyage which to every one of the party had been a succession of surprises and pleasures.

To the average citizen of the United States, South America is "terra incognita," a remote sort of mystery, an indefinite place where coffee grows on trees and where monkeys throw coconuts at one another, while parrots screech and untamed Indians roam the forests and the plains. He thinks of it as being hot as blazes, that the whole



GOVERNMENT PALACE AND NATIONAL THEATER, CITY OF PANAMA.

This imposing building, which covers an entire block, is located near the bay. It was completed in 1908 and cost about \$600,000. The theater is subsidized by the Government of Panama, and has a seating capacity of 1,500.



THE NEW MUNICIPAL BUILDING, CITY OF PANAMA

This modern building fronts on the Plaza Independencia, formerly known as the Cathedral Plaza, and forms quite a contrast to the artistic old cathedral, fronting the same square, which was completed in 1760.

continent is in the Tropics, and that only in the larger cities do the people wear clothes. He has no more definite knowledge of the real extent of the continent or of the size of the countries composing it; of the variety of climate and of the wonderful wealth of these countries; of the high state of education, culture and refinement of its leading people; and the remarkable strides they have made in government, science, and art, than he has of the conditions in the interior of Africa. Yet the South Americans are our neighbors and sharers in all the glories of the New World.

How many of our college graduates even know that the 20 countries of Latin America, from Mexico down to the tip of the Horn, embrace an area of 9,200,000 square miles—about three times that of the United States proper—and have a population of 70,000,000, whose commerce with the rest of the world amounted to \$2,500,000,000 last year?

The opening of the Panama Canal, however, is attracting the attention of our business men to the great continent that lies southeast of us. In asking questions about the west coast they are incidentally beginning to get ideas about the east coast. In investigating the business opportunities that are expected to open to them they are also getting information of the wonderful resources and wealth of the great southern countries. In asking what they can sell they are also finding out what they can buy. In informing themselves relative to commercial facts they are also learning something of the less sordid, of the historical, cultural, and ideal phases of civilizations hitherto unknown to them.

Many are beginning to wonder if they haven't missed something, and are asking questions as to just what may be seen and enjoyed in a short tour of South America. It was with the purpose of giving such interested inquirers a general outline, a few feeble pen pictures, of what such a journey has to offer to the tourist who desires to take a delightful excursion over unbeaten paths of travel, with a maximum of comfort and a minimum of trouble and expense, that this series of articles has been penned.

The writer has given his own impressions of what he saw and experienced, and but few historical or statistical facts have been dealt with. He went as a tourist and enjoyed no special privileges or advantages, and the scenes and experiences outlined in the foregoing pages are merely those which any tourist may expect to enjoy.

The 80 days have passed. The Statue of Liberty, the grandest and most significant in the world, stands boldly outlined against the blue of an April sky: every one of the two hundred and thirty-odd tourists is hustling and hurrying to get together the small belongings left unpacked; a general handshaking and cordial farewells among the friends and companions of a most delightful vacation ensues; the *Bluecher* comes to a stop with a gentle bump against the pier—and the band is playing The Star Spangled Banner.

INTERNATIONAL CON- GRESS OF STUDENTS¹

A WORLD congress of students, more comprehensive in scope than anything yet attempted in the way of international gatherings of young scholars, will be held on North American soil August 27–September 16, 1913. Beginning at Boston and Cambridge, and extending through New York, Albany, Schenectady, Niagara Falls, Ithaca, Philadelphia, and Washington, an itinerary has been worked out by the committee in charge, which bids fair to present to the distinguished foreign delegates a kaleidoscopic succession of festivities, deliberations, addresses, receptions, contact with men of international fame, inspections of historic places, industrial plants, and scenic wonders, and opportunities for a first-hand study of North American metropolitan life.

For the students of the two Americas the congress will not only reinforce the cordial relations which are being more and more firmly cemented through the periodic international congresses of American students, but it will afford them an opportunity to establish connections with leading representatives of students' organizations of the whole world—connections that may prove of tremendous significance for the future peace of the world. For, from the acceptances already received, it is evident that young scholars from China, Japan, India, the Near East, South Africa, Egypt, Tunis, Europe, and the Americas will attend. The gathering will thus be truly international in scope.

As announced in the "Call" to the students of the world just issued by the congress committee, the object of the congress "will be to bring together representatives from all the students of the world, in order that the spirit of international brotherhood and humanity may be fostered among them as a result of the deliberations of the congress, and in order that the students of the world may be united into an all-embracing world organization."

The congress will be known officially as the Eighth International Congress of Students, as it is the eighth biennial convention of the *Fédération Internationale des Étudiants* "Corda Fratres." This organization was founded by a brilliant Italian student of Turin, Dr. Elisio Giglio-Tos, and proclaimed from the historic Forum Romanum at Rome in 1898. Its principal object is that of protecting and spreading the idea of fraternity and solidarity among students of the world, without either favoring or opposing any particular political.

¹By Louis P. Lochner, University of Wisconsin, General Secretary of the *Fédération Internationale des Étudiants* "Corda Fratres."



THE COSMOPOLITAN CLUB AT CORNELL UNIVERSITY, ITHACA, NEW YORK

Where the official sessions of the Eighth International Congress of Students will be held September 5-7, 1911.

of the "Revista" of that Centro. From Chile, too, an exceedingly competent delegation appeared in the persons of Felipe S. Corona, of Copiapo, and Guillermo Aguero D., of Santiago. Brazil, while not sending a personal direct delegate, was represented in the person of J. P. de Barros Monteiro, at that time a student at Purdue University, Lafayette, Ind., and one of five representatives of the Association of Cosmopolitan Clubs.

As I write these lines I have before me the daily Italian papers that reported the Corda Fratres congress, and again and again I find a tribute paid to the splendid South American delegation.

All these delegates left Italy full of enthusiasm for the Corda Fratres cause. Two of them, d'Alessandro and Ballester, had even been elected representatives of their country on the International Central Committee, while the Chilean delegates would undoubtedly have been accorded a similar honor except for the fact that they felt that it would be unwise for them to do so before their association was an integral part of the international federation.

When, at the Third International Congress of American Students, held at Lima in July of last year, the resolution to affiliate with the Corda Fratres movement was presented by the Argentines,

we need little wonder that this time the alliance was consummated, and the 40,000 students comprising the Liga de los Estudiantes Americanos became a part of the Corda Fratres world movement.

But to resume my story of the coming congress. The official sessions will be held September 3-7 at Ithaca, N. Y., where the Cosmopolitan Club of Cornell University will throw open its magnificent \$50,000 clubhouse and lodge the representatives of all nations under a common roof. Ithaca is a most charming spot. Endowed by nature as few university towns in the world, lake and ravine and glen rivaling in affording pleasure to the eye; equipped with one of



MR. LOUIS F. LOCHNER

General Secretary of the International Federation of Students, also prominently identified with the Association of Cosmopolitan Clubs. The latter organization represents the student movement of North America with chapters in most of the leading universities of the United States and one in Canada.

the most important universities in the United States, it should form an ideal spot for the solemn deliberations of the congress.

Cornell University is interesting for another reason—namely, for the great number of students from Latin-American countries enrolled in its various courses. Seventy-six of them are matriculated for the college year 1912-13, the distribution by countries being as follows: Argentina, 8; Brazil, 11; Cuba, 17; Chile, 1; Colombia, 1; Dominican Republic, 1; Ecuador, 2; Mexico, 10; Nicaragua, 1; Panama, 3; Peru, 4; Porto Rico, 17.

The Cornell Cosmopolitan Club is easily the strongest branch in the association of cosmopolitan clubs. It was founded in 1904 by Modesto Quiroga, of Argentina, who is now connected with the department of education of his country.

The congress festivities are to begin at historic old Boston on August 27, where the delegates for three days are to be the guests of that hospitable city, and are to visit the many spots that are so intimately connected with the history of North American struggle for independence. Cambridge, the seat of Harvard University, is but a short distance from Boston, and the foreign delegates will thus have an opportunity to visit this international temple of learning.

From Boston the tentative itinerary provides that the delegates proceed to New York, but only a day is to be spent there in an automobile trip of the city, as a more detailed visit is scheduled at the end of the itinerary.

A boat will be chartered to convey the congressists to the capital of the State—Albany—by way of the wonderfully beautiful Hudson River, the Rhine of North America. The celebrated palisades of the Hudson can thus be seen at close range. At Albany several treats are in store. The governor of the State, Hon. William Sulzer, has kindly consented to tender a reception to the visitors. The spacious capitol building and the magnificent library are but two of the major attractions of the city.

A night's ride will bring the visitors to Schenectady, a city famed the world over for its tremendous manufacturing plant, the General Electric Co. Here the delegates can study North American industrial methods and compare them with their own.

From Schenectady a short ride will convey the delegates to that marvelous work of nature, the Niagara Falls. "Our Lord's organ" it was termed by a German poet who was especially attracted to the wonderful music of the rolling waters. The methods of utilizing the water power in manufacture will also be inspected in detail.

After four days of pleasant reunions, serious deliberations, and entertaining inspections of the university and agricultural buildings of Cornell, the delegates will be invited to proceed to Philadelphia, the City of Brotherly Love, the home of William Penn, who knew as no other how to deal with the Indians. Philadelphia is noted also

for its Independence Hall, from which the autonomy of the United States was first proclaimed to the world, and for many other historical facts connected with North American history. The University of Pennsylvania will be inspected under the guidance of members of the Pennsylvania Cosmopolitan Club. This university has more Latin Americans than any other North American seat of learning. One of its most honored faculty members is Dr. Lee S. Rowe, whose name is too well known to readers of the BULLETIN to need further comment.

Even the most rapid itinerary would be incomplete without an excursion to the Nation's Capital, Washington, and the Nation's metropolis, New York. Washington abounds in magnificent buildings, artistic monuments, and beautiful scenery. Two special attractions will be offered to the visitors. The first is a brilliant reception in the Hall of the Americas at the Pan American Union, made possible through the kind interest of Director General Barrett in the congress. To the delegates from the Americas, especially, the visit to the Union will be something to be remembered all their lives, for it is this Union, more than any other single factor, that has made possible the intimate relations between the American Republics. The other *pièce de résistance* is the projected reception by the President



DR. GEORGE W. NASMITH.

President of the Central Committee of Cordoba, President of the International Federation of Student Unions, and a prominent member of the organization of students. It is a central organization comprising the various student organizations of Europe, South America, and the Association of Cosmopolitan Clubs in North America.

of the United States, Hon. Woodrow Wilson, for many years president of Princeton University. While this reception is contingent upon the President being in Washington at this time, there is every hope that the visitors may have the opportunity to meet this distinguished friend of students.

As a fitting close to the congress, the delegates will be taken to New York City, where they will be housed free of cost in the dormitories of Columbia University, where the New York Peace Society will tender a banquet to them, where Mayor William Gaynor will

transmit the official greetings of the city, and where no end of entertainment and profitable sightseeing is in store for the delegates.

The preparations for the congress are now well under way. Invitations to the students of the world have been sent to all the ministries of education, to the foreign ambassadors, and to all the student associations whose names could be learned by the congress committee headed by Carlos L. Loesin of Cornell University, a Filipino student of remarkable organizing powers. An honorary committee headed by President Wilson, and comprising such names as those of United States



MR. CARLOS L. LOESIN.

Chairman of the General Committee of the Eighth International Congress of Students. This congress, called under the auspices of the "Cord Fraternus" International Federation of Students—will take place August 27-September 16, 1913. Official sessions will be held at Cornell University for several days, and the remaining time consumed in visiting leading cities of historic interest.

Commissioner of Education Philander P. Claxton, Director General John Barrett of the Pan American Union, Secretary Benjamin F. Trueblood of the American Peace Society, Gov. Sulzer and Mayor Gaynor of New York, Director Edwin D. Mead of the World Peace Foundation, Editor Hamilton Holt of the Independent, and the presidents of practically all colleges and universities at which there are cosmopolitan clubs, is giving its moral support to the congress.

It is too early as yet to submit detailed information as to the rules of the congress, the expense of making the voyage, and of completing the itinerary above outlined. Students who are interested in this congress may obtain additional

information either by writing to the Editor of the BULLETIN, who will keep in constant touch with the committee on arrangements, or by making inquiries directly of the chairman of the congress committee, Mr. Carlos L. Loesin, Cornell Cosmopolitan Club, Ithaca, New York, U. S. A.

In the words of the congress Circular No. 1 just issued, "there opens before us a door of wonderful opportunity for encouraging the cause for international good will and humanity by uniting the students of the world more closely in this international congress."

ADMIRAL DAVID PORTER'S RECEPTION IN CHILE

MARCH 15-22, 1813.

ADMIRAL—then Captain—David Porter sailed in the U. S. S. *Essex*, 46 guns, from the Capes of the Delaware on October 28, 1812. The *Essex* was built at Salem, Essex County, Massachusetts, in 1799, not far from where there was then playing as a child another American destined to be famous in Chilean history—William Wheelwright.

After passing the Straits of Le Marie on February 26, Capt. Porter found himself about 20 miles from the coast of Chile, and on the morning of the 15th of March he entered the harbor of Valparaiso. We will quote his own words as to his reception there.

Before I had got to anchor the captain of the port was met by another officer, and in board in the convenient barge, with an offer of every facility, assistance, and accommodation that Valparaiso could afford, and twenty last refreshment. I was informed that they had shaken off their allegiance to Spain; that the ports of Chile were open to all nations; that they looked up to the United States for America for example and protection; that our arrival would be considered the most joyful event, as their commerce had been much harrassed by corsairs from Peru, sent out by the viceroy of that province to capture and send in for adjudication all American vessels destined for Chile, and that five of them had disappeared from before the port only a few days before my arrival, and had captured several American whalers and sent them to Lima.



ADMIRAL DAVID PORTER

Wm. H. Mumford, Esq., U. S. Navy, 1860.
From the collection of the U. S. Navy.

The affair of the salute was arranged, and, after anchoring, I saluted the town with 21 guns, which were punctually returned, immediately after which I waited on the governor, Don Francisco de la Lastre,¹ who gave me the most friendly, and at the same time unceremonious, reception. On my passing the American armed brig *Colt* she fired a salute of nine guns, which was returned by the *Essex* by seven. I had not been long with the governor before I discovered that I had, happily for my purpose, got among staunch republicans—men filled with revolutionary principles and apparently desirous of establishing a form of government founded on liberty. The captain of the port, whose name I do not recollect, was a sterling honest patriot, and spoke his sentiments boldly. He evidently felt as those should feel who are determined to be free, appeared sensible they had yet much to do, and I am sure was resolved to do his utmost to emancipate his country.

A courier was immediately dispatched, by the American vice and deputy consul, to Santiago, the capital of Chile, to inform Mr. Poinsett, the American consul general, of our arrival in the port of Valparaiso.



Extract from National Cyclopaedia of American Biography.

ROBERT POINSETT.

The United States Consul General at Santiago, Chile, who assisted in welcoming and entertaining the travelers when they arrived at Valparaiso.

When we first arrived a few boats came off with fruit; in a few hours our supply was abundant. Nothing could exceed the excellence and abundance of the apples, pears, peaches, nectarines, melons, onions, potatoes, and vegetables of every description. The potatoes are superior in size and quality to those of any other country and are indigenous. Tons of the foregoing articles were sold to our people, which were laid by as a sea stock, as well as hogs and poultry in great numbers, and of the best qualities; the fowls are of the largest size. No part of the world could have afforded us a more ample supply of everything we wanted of the provision kind.

The flour and bread were of a very superior quality and could be procured in any quantities without difficulty. All the dry provisions were put up in hides; the flour was better secured in them and more closely packed than it could possibly be in barrels; and, although much heavier, we found them more manageable. The use they make of hides is astonishing. The most of the furniture for their mules and horses and their houses, on some parts of their coast, even their boats, or, as they are called, balsas, are made of this article. It is used for every purpose to which it is possible to apply it, either whole, cut in pieces, or in long strips. When used for balsas, two hides each, cut something in the form of a canoe, with the seam upward, are blown up by means of a reed and stopped together; a piece of board is then laid across to sit on, and on this frail machine they venture a considerable distance to sea. The laque, for the use of which the Chileans are so famous, is formed of a very long strip of hide with a running nose, and their dexterity in using it, in catching animals at full speed, is surprising. Every pack horseman and driver of a jackass is furnished with one of them; and so much do they delight in them or in showing their dexterity that when they wish to catch any one of their drove, either to load, unload, or for any other purpose, they take their distance, deliberately coil up their laque, and never fail of throwing it over the neck of the animal wanted.

On the 17th Capt. Munson, of the American brig in port, arrived from Santiago, bringing me a letter from the consul general, inviting myself and officers, in the name

¹ Afterwards, in March, 1814, Supreme Director of Chile.

of the Government of Chile, to visit the capital and informing us that horses and every other convenience were provided for on the road. Capt. Munson was also desired by the consul to inform me that the President and junta, with a large military escort, would meet us at a considerable distance from the city, and that, in a political view, they considered our arrival as the most happy event. Capt. Munson stated that the bells had been rung the whole day and illuminations had taken place the evening after our arrival was announced, and that it was generally believed that I had brought from my country nothing less than proposals for a friendly alliance with Chile and assurances of assistance in their struggle for independence. This idea I felt no disposition to do away with.

Around the governor's residence we attended a party, where we found a much larger and more brilliant assembly of ladies than we could have expected in Valparaiso. We found much fancy and considerable taste displayed in their dress, and many of them very handsome, both in person and in face, their complexion remarkably fine, and their manners modest and attracting. With their grace, their beauty of person and complexion, and with their modesty we were delighted, and could almost fancy we had gotten amongst our own fair countrywomen.

After all was over we returned on board our ship, pleased with the novelties of a Chilean ball and much gratified by the solicitude shown by every one to make our stay amongst them agreeable.

Before the *Essex* left Valparaiso, which Porter describes as "pleasantly situated, and is a place of considerable commerce," Luis Carrera, "a spirited youth about 22 years of age," the brother of the President, dined on the *Essex* with Consul General Poinsett and Consul Haywell, the representatives of the United States of America in Chile. The night before sailing the governor of Valparaiso entertained them with a dinner and ball. "The night was spent with much hilarity." It is interesting to note that Admiral David Glasgow Farragut was with Porter at this time as a midshipman, only 13 years old.



ADMIRAL DAVID GLASGOW FARRAGUT.

U. S. NAVAL ARCHIVES, PHOTODUPLICATION SERVICE, 734 N. YALE AVENUE, ANN ARBOR, MICHIGAN 48106-1500

LANGE'S "IN THE AMAZON JUNGLE"

DURING the spring of last year a book with the modest title "In the Amazon Jungle" came from the press and immediately attracted considerable attention, particularly in that ever-widening circle of readers who are interested in books of travel and adventure which deal more with fact than fiction. To these Mr. Lange's book proved a most fascinating narrative, while that portion of the work which deals with his stay among the Mangaromas, a tribe of uncivilized Brazilian Indians, aroused comment and discussion among ethnologists and explorers generally. That these Indians, whose customs, modes of living, weapons, utensils, communal dwellings, etc., differ but little from those other tribes with whom Dr. Koch-Grünberg sojourned for several years in the upper reaches of the Amazon and its tributaries, should be charged with the revolting practice of cannibalism is a remarkable feature almost inexplicable in the light of the experience of the German and French explorers who have penetrated into the far recesses of Brazil's virgin forests. At any rate, Mr. Lange's narrative aroused sufficient interest to warrant the fitting out of an elaborate expedition by the University Museum of Pennsylvania, an account of which appeared in the November **BULLETIN**. This expedition is to visit the same section where Mr. Lange suffered his unusual experiences and the scientific results thereof are awaited with great interest.

The story of his experiences in the Brazilian wilds is told by Mr. Lange in a simple, unaffected, natural style devoid of any attempt at "fine" writing, and without any apparent effort to create the impression that he had accomplished anything very wonderful. The narrative being largely one of his own extraordinary experiences the personal element necessarily enters into the story quite frequently but generally in such a modest and unassuming manner that the reader is quite charmed and feels as though the writer were taking him into his confidence.

He begins his story at the point where he leaves the up-river steamer at a little frontier post on the Amazon River, near the mouth of the Javary River, which forms the boundary between Brazil and Peru for something like 700 miles of its length. His landing at this out-of-the-way spot he describes thus:

My eyes rested long upon the graceful white painted hull of the *R. M. S. Mauro* as she disappeared behind a bend of the Amazon River, more than 2,200 miles from

In the Amazon Jungle. By Algot Lange. New York: G. P. Putnam's Sons, 1913. 461 p. Six illustrations. price \$2.50.

GENERAL VIEW OF PLANT OF MILES FROM IN THE AMERICAN





Courtesy of G. P. Putnam's Sons

INTERIOR OF A RUBBER-WORKER'S HUT

"I spent my time going around to visit the homes of the *sacaguitos*. They were all as paltry as their chief, and after exchanging the salute of 'boa dia,' they would invite me to climb up the ladder and enter the lat. Here they would invariably offer me a cup of strong coffee. There were always two or three hammocks, of which I was given the one I liked best. The huts generally consisted of two rooms with a few basinet boxes as chairs and Winchester rifles and some fancy painted paddles to complete the furniture." (From "In the Amazon Jungle")

the Atlantic Ocean. After 14 days of continuous travel aboard of her I was at last standing on the Brazilian frontier, watching the steamer's plume of smoke still hanging lazily over the immense, brooding forests. More than a plume of smoke it was to me then; it was the final link that bound me to the outside world of civilization. At last it disappeared. I turned and waded through the mud up to a small wooden hut built on poles.

It was the end of January, 1910, that saw me approaching this house, built on Brazilian terra firma—or rather terra aqua, for water was inundating the entire land. I had behind me the Amazon itself, and to the right the Javary River, while the little house that I was heading for was Esperança, the official frontier station of Brazil. The opposite shore was Peru and presented an unbroken range of dense, swampy forest, grand but desolate to look upon.

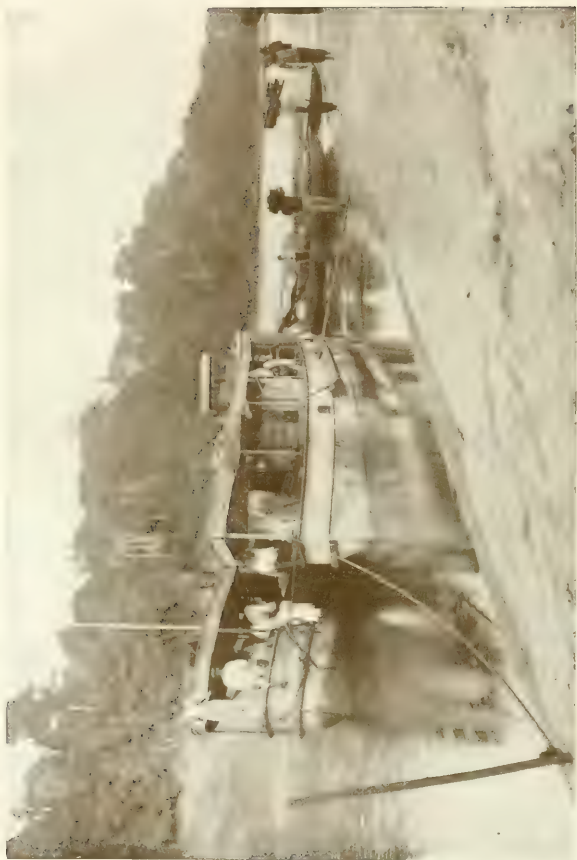
From this post he embarked in a steam launch the same evening and proceeded to Remate de Males where he arrived after nightfall. Remate de Males, freely translated, means "Culmination of evils," a name bestowed upon it in memory of the misfortunes of the prospector and his family who first settled the place about 30 years ago. The following excerpts from Mr. Lange's descriptions will give some idea of this little metropolis of the jungle:

It is a little village built on poles; the last blaze of civilization on the trail of the upper river. When the rainy winter season drives out of the forests every living creature that can not take refuge in the trees, the rubber workers abandon the crude stages of the manufacture that they carry on there and gather in the village to make the best of what life has to offer them in this region. At such times the population rises to the number of some 500 souls, for the most part Brazilians and domesticated Indians or "caboclos." * * *

The village is placed where the Itecoahy runs at right angles into the Javary, the right-hand bank of the Itecoahy forming at once its main and its only street. The houses stand facing this street, all very primitive and all elevated on palm-trunk poles as far as possible above the usual high-water mark of the river. Everything, from the little sheet-iron church to the pigsty, is built on poles. Indeed, if there is anything in the theory of evolution, it will not be many generations before the inhabitants and domestic animals are born equipped with stilts. * * *

About 65 houses, lining the banks of the Itecoahy River over a distance of what would be perhaps six blocks in New York City, make up Remate de Males. They are close together and each has a ladder reaching from the street to the main and only floor. At the bottom of every ladder appears a rudimentary pavement, probably 5 square feet in area and consisting of 50 or 60 bottles placed with their necks downward. Thus, in the rainy season when the water covers the street to the height of 7 feet, the ladders always have a solid foundation. The floors consist of split palm logs laid with the round side up. Palm leaves form the roofs, and rusty corrugated sheet-iron, for the most part, the walls. Each house has a sort of back yard and kitchen, also on stilts, and reached by a bridge.

Mr. Lange's account of the life of the rubber workers in Remate de Males is full of human interest. He remained there from January until June, when an opportunity presented itself to go up the Javary River to the headquarters of the largest rubber estate in the Javary region. Coronel da Silva, the owner of the estate, lived at the headquarters which was known as Floresta, and it was he who later proved a most gracious host and steadfast friend to the young



Courtesy of G. P. Fortnum & Sons

THE LAUNCH "CAROLINA."

The vessel in which Mr. Lange and the rubber workers made the trip up the Javary River from Remate de Males to Floresta



LOADING RUBBER ON SANGRE IN THE AMAZON RIVER REGION

explorer. The trip up the Javary was made in a 40-foot launch crowded to the utmost with about 120 people and several tons of merchandise and consumed the better part of two weeks. While the discomforts of the journey were considerable Mr. Lange seems to have enjoyed the wonderful tropical scenery and unique character of his environment, the following paragraphs serving as examples of his interesting descriptions.

It would be impossible for even the most fantastical scenic artist to exaggerate the picturesque combinations of color and form ever changing like a kaleidoscope to exhibit new delights. A tall and slender palm can be seen in its simple beauty alongside the white trunk of the embauba tree, with umbrella-shaped crown, covered and gracefully draped with vines and hanging plants, whose roots drop down until they reach the water, or join and twist themselves until they form a leaf portière. And for thousands of square miles this ever changing display of floral splendor is repeated and repeated. And it would be a treat for an ornithologist to pass up the river. A hundred times a day flocks of small paroquets fly screaming over our heads and settle behind the trees. Large green, blue, and scarlet parrots, the araras, fly in pairs, uttering penetrating, harsh cries, and sometimes an egret with her precious snow-white plumage would keep just ahead of us with graceful wing motion, until she chose a spot to alight among the low bushes close to the water front.

The dark-blue toucan, with its enormous scarlet and yellow beak, would suddenly appear and fly up with peculiar jerky swoops, at the same time uttering its yelping cry. Several times I saw light green lizards of from 3 to 4 feet in length stretched out on branches of dead trees and staring at us as we passed.

After his arrival at Floresta he arranged to continue with the launch for a two days' voyage up the Branco River, but upon arriving at its mouth Mr. Lange was too ill with his first attack of Javary fever. He was put ashore to be taken care of at the hut of a manager of the rubber estate. The same day a young boy and later a big Brazilian negro were brought to the same place suffering from the same complaint, which in their cases proved fatal. After several days of high fever the explorer grew better and was finally taken back to Floresta in a canoe.

The account of his stay with Coronel da Silva, his experiences in the jungle, descriptions in detail of the manner of preparing the rubber, lives of the rubber gatherers, the animal life of the forests, the fish of the lakes, the killing of the huge "sucuruju" or boa constrictor having a length of 56 feet, and all the details of a stay of several weeks make most interesting reading.

For five months he lived at Floresta and gathered much valuable information as to the fauna and flora of this section of Brazil. The lust for further excitement, however, led him to join an expedition into hitherto unknown parts of the eastern forests for the purpose of hunting and locating new rubber trees. He was warned repeatedly as to the dangers of such an excursion but persisted in his determination and came very near losing his life as a consequence. The party of six Indians and Lange penetrated far into the unexplored wilds,



A SEWING MACHINE IN AN INDIAN HUT

Miss J. M. Smith, who is a native of the United States, is the owner of the sewing machine. She is a member of the American Mission Society, and has been in the service of the Society for many years.



COURTESY OF G. F. PATTERSON'S NOTES

"DEFUMADOR," OR SMOKING HUT.

"A *seringueiro* to-day collected his product, and when I went to the smoking hut I found him busy turning over and over a big stick, resting on two horizontal guides, built on both sides of a funnel from which a dense smoke was issuing. On the middle of the stick was a huge ball of rubber. Over this he kept pouring the milk from a tin basin. Gradually the substance lost its liquidity and coagulated into a beautiful yellow-brown mass, which was rubber in its first crude shipping state." (From "In the Amazon Jungle.")



LAKE INNOCENT

View of Lake Innocent, Victoria Nyanza, from the Victoria Falls Hotel, Victoria, N. Rhodesia, 1905. (M. 1000)



Courtesy of G. P. Putnam's Sons

THE TOUCAN.

"The dark blue toucan, with its enormous scarlet and yellow beak, would suddenly appear and fly up with peevish peck-swoop, and the same time uttering its yelping cry." (From "In the Amazon Jungle.")

and when their food supply was almost exhausted and the party had lived for about three weeks on the occasional monkeys and tapirs they succeeded in killing, they started on the return journey. It was while at the farthest "tambo" or camp that Lange discovered some irregular clumps or nodules of clay in the bed of a small stream which, upon being split open with a machete, turned out to contain masses of grains of gold. He filled five empty plate boxes with this gold and states that he could have filled a barrel. He was having a continuous fever and was too exhausted to care for gold. The party separated, the chief and one other Indian accompanying Lange while the others sought another route. It was on this terrible return trip that the explorer, after both of his companions had died, one from that dreadful disease, beriberi, and the other from the bite of a poisonous snake, after crawling for hours on hands and knees through the thick undergrowth of the forest, at times losing consciousness, was finally rescued by some Mangeroma Indians who took him to their communal dwelling and under the direction of their chief nursed him back to life.

It is this portion of his book, describing the smallest details of the habits, customs, modes of life, etc., of this uncivilized tribe that is of the greatest interest. Not until his kind hosts had killed a party of Peruvians who had invaded their domains did Lange know that he was among cannibals. From his account the Mangeromas make a practice of cooking and eating portions of their enemies killed in battle. The preparation of the dreaded "wourahli" poison with which they poison their blowgun darts and arrows, and their ingenious traps and devices for slaying their enemies, etc., are all most interesting features of the narrative. Altogether the book is most remarkable and intensely interesting.



SECRETARY KNOX'S FARE- WELL TO THE GOVERNING BOARD

AT the monthly meeting of the Governing Board of the Pan American Union held on the forenoon of February 19, 1913, the last meeting to be presided over by the Secretary of State, in his capacity as chairman *ex officio*, Secretary Knox took occasion of that opportunity to bid farewell to his erst-while colleagues of the board. The meeting was largely attended in compliment to the chairman, who during the past four years as Secretary of State of the United States had won a notable place in the affections and esteem of the Latin-American diplomats accredited to Washington.

In attendance at the meeting were Señor Domicio da Gama, ambassador of Brazil; Señor Don Joaquín Bernardo Calvo, minister of Costa Rica; Señor Don Ignacio Calderón, minister of Bolivia; Señor Don Federico Mejía, minister of Salvador; Señor Dr. P. Ezequiel Rojas, minister of Venezuela; Señor Dr. Salvador Castrillo, minister of Nicaragua; Señor Leó. Antonio Martín-Rivero, minister of Cuba; Señor Dr. Rómulo S. Naón, minister of Argentina; Señor Dr. Carlos María de Pena, minister of Uruguay; Señor Don Eduardo Suárez Mujica, minister of Chile; M. Solon Ménos, minister of Haiti; Señor Don Joaquín Méndez, minister of Guatemala; Señor Don Federico Alfonso Pezet, minister of Peru; Señor Dr. Alberto Membreño, minister of Honduras; Señor Dr. Héctor Velásquez, minister of Paraguay; John Barrett, the Director General, and Señor Don Francisco J. Yánes, assistant director and secretary of the governing board. Illness made it impossible for the ministers of the Dominican Republic, Colombia, Panama, and the *chargé d'affaires* of Mexico to be present.

After a brief report by the Director General on the remarkable increase in the volume of correspondence conducted by the Pan American Union, and on the large number of publications distributed by this institution, totals which during the month of January, 1913, eclipsed all former records by many thousands, Chairman Knox arose to make his farewell address, and said:

GENTLEMEN: During the four years of my service as Secretary of State I have found especial satisfaction in being privileged to associate with you on this common meeting ground where the intermingled economic, intellectual, and social interests of the sovereign peoples of the Western Hemisphere are represented and where the good of



Photograph by Harris Laing

[HONORABLE PHILANDER C. KNOX.

The retiring Secretary of State and Chairman ex officio of the Governing Board of the
Pan American Union

all is sought through the contributory effort of each. For my part I have ever striven to be the faithful exponent of the good will of this Government and my continuance toward our comrades in the American community of nations and I am with that peace and prosperity may be the abiding portion of our sister Republics. I have endeavored to take advantage of my present office to give the good will of the United States effective shape in the relations of this Government to those which you so worthily represent, and I have tried to leave nothing undone whereby the United States could testify its sincere wish that each and all of the American Commonwealths should go forward in the path of national progress and established well-being.

It is to be borne in mind that the body politic of the western world is, like the human body, made up of members, each performing its appropriate function and all suffering more or less by the derangement of any of them. There is no question of the relative importance of their several offices, any more than there can be of primacy among the members of the human body. No one may gain advantage for itself alone.

Sometimes, my friends, I have heard apprehensive charges that my country is asserting and abusing a claim of primacy in our western councils and arrogating to itself some undefined dictatorial prerogative to the end of ultimate absorption of its neighbors. It has been the constant effort of the President and his constitutional advisers to correct any such malevolent impression and to dispel all such caviling forebodings.

Time and again have we demonstrated that if, in the workings of God's will, it has been given to us to exert influence upon our congeners of Pan America, it has ever been our steadfast purpose to use that influence rightfully and benignly in the direction of the independence, the stability, and the prosperity of all of your countries; in short, as I have said on many occasions, we seek, whenever practicable, to aid them to help themselves; to assist them in averting domestic or foreign complications that might tend to endanger their own welfare; to promote such observance of their sovereign national rights as we expect them to show for our rights; to spare neither toil nor treasure whenever our just efforts may conduce to their development and prosperity.

It is not without a personal feeling of sadness that I address you for the last time, and yet it is a sadness tempered with gratification, for my own part, that it has been vouchsafed to me to share in your deliberations. In speaking to you as I have done, it has not been in my thoughts to deliver a homily, but rather to make plain once more the true nature of the relation my country bears to yours. You, gentlemen, are in a position to know and to cause your fellow citizens to know how consistently, how earnestly, and how unselfishly this Government and my country desire that all Latin America shall enjoy, as we enjoy, the benefits to flow from the possession of independence and the stable achievement of material progress.

In response to these impressive remarks, the Brazilian ambassador, Dr. da Gama, in behalf of his colleagues on the governing board, paid a tribute to Secretary Knox, in which was embodied a resolution of appreciation of the Secretary's services and an expression of regret at his departure. The ambassador spoke as follows:

GENTLEMEN: I claim as an honor the privilege of giving voice to the feelings of all the members of the governing board of the Pan American Union at the thought that this is the last of our meetings presided over by Secretary of State Knox.

There is always some melancholy in a parting; but in this special case we fully realize that we are going to lose a perfect chairman, as for amiability and rightness; a cordial companion of labor, a colleague in the true sense of the word, who understood us, who at least always tried to understand us, even when we were not

very clear in our so-called outbursts of fiery southern eloquence, which, by the way, look so moderate and cold before United States lyrics in political speeches.

If he sometimes found us obscure, he did not show it; the placid smile which, with his long pensive looks, so harmoniously completes his physiognomy never left him when presiding over us. He certainly considered then that man is always obscure to man, even under the desire to agree, if the expression of their souls is different. But the community of interests dispenses a very literal translation on the drafting of agreements. And this wise man well knows that, although hailing from different countries, we are fellow companions on the journey toward the same end. Before our parting we wish to give him a testimony of our appreciation of the services he rendered to the Pan American Union, and I move that in the record of this meeting the following resolution be registered:

Resolved, That the representatives of the American Republics wish to express their regret at the closing of their official relations with the retiring Secretary of State, Philander C. Knox, for whom they all entertain the highest personal regard and admiration. They are thankful to him for his constant good will and exquisite courtesy and trust he will not forget his colleagues of the Pan American Union, who bid him goodbye with a heavy heart.

The motion of the ambassador on the resolution was simultaneously seconded by the ministers of Costa Rica and Bolivia, and was unanimously adopted. When apprised of this motion, Minister Peynado, of the Dominican Republic, who was then convalescing in New York, requested that his vote be recorded in favor of the resolution.



RECEPTION OF MINISTER FROM PARAGUAY

THE Bulletin of the Pan American Union extends a cordial welcome to Señor Dr. Héctor Velázquez, the newly accredited envoy extraordinary and minister plenipotentiary of the Republic of Paraguay to Washington. By virtue of his diplomatic position, Dr. Velázquez becomes a member of the governing board of this institution. This is the first time within the past eight years that Paraguay is represented in the councils of the Pan American Union, and it is gratifying to note that the presence of Señor Velázquez on the governing board is regarded with much satisfaction by his colleagues. The facilities of this institution and the columns of the BULLETIN will always be at the disposal of the new minister and it is sincerely hoped that his interest in the progress and welfare of the Pan American Union will lead him to make frequent use of these opportunities.

Minister Velázquez was officially received by President Taft at the White House on February 18, 1913. In presenting his letters of credence Señor Velázquez said:

MR. PRESIDENT: I have the honor to place in your hands the letters of credence which accredit me in the capacity of envoy extraordinary and minister plenipotentiary of Paraguay near the Government of the United States of America.

The normality of institutional life having been restored in my country after the repeated difficulties of its internal policy, one of the first preoccupations of my Government was to send to friendly nations the expression of its sympathies and sincere longing to emphasize and enhance its ever-cordial brotherly relations with them. And it affords me special pleasure to have received this honorable mission to your Government, all the more as the sentiments I have just expressed are united with the Paraguayan people and Government's admiration for the great Nation over whose destinies you preside and for the virtues and patriotism of its statesmen who have made it a people of character and exceptional ideals for progress.

Permit me, Mr. President, to cherish the conviction that in the discharge of my duties I may count upon your benevolence and the support of the enlightened American Government, thus bringing me the assurance that the yearnings of my country and my own aspirations will be realized.

Permit me also, Mr. President, to discharge the most gratifying duty of expressing to you the very sincere wishes formulated through me by the Paraguayan Government and people for the aggrandizement and growing prosperity of the magnanimous American people and the personal happiness of their illustrious President, and it is an honor for me to join my own wishes to these.

In accepting the minister's credentials the President said:

MR. MINISTER: I am gratified to receive from your hands the letter of His Excellency the President of Paraguay accrediting you in the capacity of envoy extraordinary

and minister plenipotentiary from that Republic to the United States, and to learn that it became the first wish of your Government after the happy restoration of normal conditions, by accrediting ministers to friendly nations to emphasize its desire to renew its cordial and fraternal relations with them.

You may rest assured that the Government of the United States sincerely appreciates the desire of the Government of Paraguay for the renewal of those relations and that its representatives will gladly cooperate with you with a view to aiding you in the successful performance of the duties imposed on you by your mission.

I receive with satisfaction the good wishes for the prosperity of this Republic and its people which you bring to me from the Government and people of Paraguay and I trust that you will assure your Government that the Government and people of the United States sincerely desire for your country and its citizens abiding peace and prosperity.



SPECIAL MISSIONS WELCOME PRESIDENT WILSON

THE Bulletin is greatly pleased to publish below the remarks made by the several ministers who came to Washington on special missions, to attend the ceremonies in connection with the inauguration on March 4, of Hon. Woodrow Wilson as President of the United States. Special envoys were sent for this occasion by the Governments of Cuba, Guatemala, and Salvador.

The special mission from Cuba consisted of the distinguished minister at Washington, Señor Don Antonio Martín-Rivero, and two eminent gentlemen of high standing in the public life of that country, Señor Don Guillermo Patterson and Señor Don Pablo Desvernine. Señor Desvernine holds a prominent position as a jurist and is professor of law at the University of Havana. He has served his country in various capacities and most notably as secretary of state in a former cabinet. Señor Patterson, too, is no stranger to Pan Americans. At present he is the subsecretary of state, to which position he has risen through his successful discharge of the various diplomatic posts held by him. As the Cuban consul in Liverpool, chargé d'affaires at Spain, and special minister to the Venezuelan Centennial he easily won the esteem and sympathy of the circles in which he moved, so that his elevation to the present high post is but the natural result of his abilities.

The special mission from the Republic of Guatemala consisted of the distinguished minister at Washington, Señor Don Joaquín Méndez, a specially accredited envoy extraordinary and minister plenipotentiary in the person of Señor Lic. Antonio Batres Jauregui, and Señor Don Francisco Sánchez Latour, the first secretary of the Guatemalan legation. Señor Jauregui was for many years minister of Guatemala at Washington, and his visit to the Capital at this time afforded him an opportunity to renew many cherished friendships of his earlier service here. Señor Jauregui, moreover, is widely known in Latin-American quarters, and has many times represented his country at important international gatherings. He was delegate to the Third International American Conference of American States at Rio de Janeiro in 1906, to the Central American Peace Conference at Washington in 1907, and to the International Commission of Jurists at Rio in 1912.

The Republic of Salvador delegated on this pleasant mission Señor Don Federico Mejía, its distinguished minister at Washington, and another diplomat and lawyer, who, though young in years, has already shown great promise of a remarkable career. The special



HON. WOODROW WILSON AND HON. THOMAS R. MARSHALL.

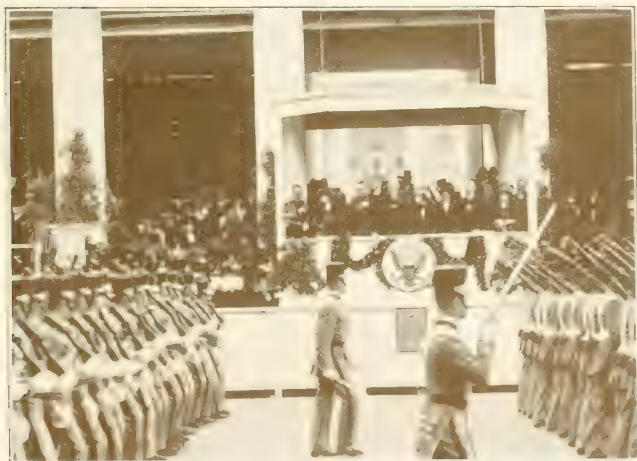
Inaugurated President and Vice-President, respectively, of the United States, on March 4, 1913, for a term of four years President Wilson was born December 28, 1856, at Staunton, Va. He graduated from Princeton University in 1879, studied Law at Virginia University, and in 1882 practiced his profession in Georgia. In 1890 he gave up his practice to become professor of jurisprudence and politics at Princeton, and in 1902 was made president of that institution. In 1910 Mr. Wilson was elected governor of New Jersey, and resigned his hold-over term to become the twenty-seventh President of the United States. He graduated from Washburn College, Indiana, in 1873, later studied Law, and commenced to practice in 1875. In 1908 he was elected the governor of Indiana. Near the expiration of his term, in 1912, he was elevated to the position of Vice-President.



Photo by A. J. Smith

THE FIRST LADIES OF THE LAND

From left to right: Mrs. Wilson, wife of the President, and Mrs. Marshall, wife of the Vice President.



PRESIDENTIAL ARMY REVIEWING INAUGURAL PARADE FROM THE COURT OF HONOR IN FRONT OF THE WHITE HOUSE

From left to right: Mrs. Wilson; Major General Wood; the President; Mrs. Marshall; the Vice President. The Court of Honor was patterned after "Monticello", the Virginian home of Thomas Jefferson, the apostle of American Democracy. The procession extended over 13 miles in length



Photography by Harris Ewing

THE INAUGURATION OF PRESIDENT WILSON AT THE EAST FRONT OF THE
CAPITOL, MARCH 4, 1913.

Chief Justice of the Supreme Court, Hon. Edward D. White, administering the oath of office to President Wilson. There were assembled to witness this solemn and imposing ceremony the immediate families of the new President and Vice President, former President Taft, the Justices of the Supreme Court, the members of the Cabinet, the foreign diplomatic representatives, distinguished officials from all over the United States, and thousands of enthusiastic and patriotic citizens.



Portrait of a man, facing.

SEÑOR DON FEDERICO MEHA

Mayor of Salvador. W. J. Wilson, of the United States, Esq., to the Hon. Sec. of the Interior, Washington.



SEÑOR LIC. ANTONIO MARTÍN-RIVERO.

Minister of Cuba at Washington, who was accredited as Special Envoy to the inauguration of President Wilson.

envoy was Señor Dr. Francisco A. Lima, who gained a conspicuous place for himself in Pan American affairs by the creditable discharge of his post as minister to Guatemala.

The sending of such a group of notable Latin Americans, charged with the particular purpose of conveying the greetings and felicitations of their respective countries to the Chief Executive of the United States, is a signal mark of the mutual interest existing between the independent nations of the Western Hemisphere, and is a gratifying indication of the desire to promote better understanding and closer friendship between the American Republics.

President Wilson received the special envoys from Salvador at the White House on Friday, March 7. The meeting was very cordial, and in presenting the greetings from the Government of Salvador, the special envoy, Señor Lima, said:

MR. PRESIDENT: We have the honor of placing in your excellency's hands the letters by which the President of El Salvador accredits us as envoys extraordinary on special mission to the Government of the United States of America on the occasion of the solemn ceremonies of the change of administration.

Commissioned thus for the purpose of making known the enthusiastic participation which our Government desires to enjoy in all those acts which emanate from this powerful Nation, which represents at the same time all that is wise and elevated in your democratic institutions, it has been a great pleasure for us to come from our country in order to bring, on such an occasion, the most cordial greetings from our President toward the newly elected President of the United States of America.

Let us be permitted, therefore, while expressing our congratulations for the success attained at the polls, to herald the sympathetic echo which the name and prestige of the chief of the Democratic Party have caused to resound in our country.

Your excellency's personality, surrounded by the highest and noblest proceedings and ideals, is undoubtedly to us the most precious jewel toward the maintenance and growth of our friendly international relations which happily have existed, and which we are anxious to see continue forever with the most frank and cordial understanding.

These are the sentiments which we have been commissioned to convey to your excellency, in the name of the President of El Salvador and in our own name. In reiterating our most sincere felicitations, we beg your excellency to accept, together with the wishes we offer for the prosperity and well-being of this noble Nation, our best wishes for your excellency's personal happiness.

To these friendly greetings the President replied as follows:

GENTLEMEN: I am happy to welcome you as envoys extraordinary on special mission bearing to me the greetings of your Government upon the occasion of my assumption of the duties of the Presidency of the United States, and to receive from your hands the letters whereby you are accredited in this quality.

I recognize in this act your Government's desire to maintain with the United States that friendship and cordiality of relations which should in the best interests of the two countries mark their intercourse and which it shall be my earnest endeavor to promote and strengthen.

I highly appreciate the kindly greetings of the President of Salvador which you bring to me, and I shall be gratified if you will be so good as to make this appreciation known to him. For the courteous and complimentary remarks which you are pleased to make personally with respect to myself, I thank you.



Photograph by Edmonstone.

SEÑOR DON JOAQUÍN MÉNDEZ.

Minister of Guatemala at Washington, who headed the special Mission from that country to the inaugural ceremonies of President Wilson.



SEÑOR DR. FRANCISCO A. LIMA.

Medicine of the School of Medicine, from Santiago, Chile, and a graduate of the University of Wittenberg.



Photography Harris Ewing

SEÑOR LIC. ANTONIO BATRES JAUREGUI.

Member of the special Mission from Guatemala to the inauguration of President Wilson.



SEN. R. DON GUTTERMO, ATTORNEY

M. ... M. ...



Photograph by HARRIS EWING

SEÑOR DON FRANCISCO SÁNCHEZ LATOUR,

Secretary of the Guatemalan Legation at Washington, member of the Special Mission to the inauguration of President Wilson.

On the following day, March 8, the Guatemalan delegates were received by the President at the White House, and on this occasion, as on the previous one, the sentiments exchanged between the envoys on special mission and the President were delightfully cordial. Speaking for the envoys, Minister Méndez said:

YOUR EXCELLENCY: The Constitutional President of Guatemala, sincere admirer of the institutions and progress of the great Republic of the United States of America, desiring to offer to your excellency his most cordial congratulations on account of your election to the presidency of this rich and powerful country, and wishing to give a proof of the esteem that the Government and people of Guatemala have for the Government and people of the United States of America, had the goodness to intrust to us the special mission of being present at the solemn ceremonies of the inauguration of your excellency to the high office of President, and to express to your excellency his most sincere felicitations, knowing that your wise administration will produce the most beneficial results over the entire continent.

The Government of Guatemala is inspired by the best wishes to bring into closer and more cordial relations that friendship which happily has existed between the two countries, and has faith that the Government of your excellency will condescend to entertain the same patriotic purposes.

We could have no greater pleasure than having been honored with the mission of congratulating your excellency and also the American Nation for having at the head of its destinies, through the popular vote, a man of high merits and notable antecedents by which your excellency is distinguished.

We therefore carry out with the greatest pleasure the special charge given to us by the President of the Republic of Guatemala, offering his very best wishes for the prosperity of the American Republic and for your excellency's personal welfare, and we, the members of this special mission, desire to express on our part the same sentiments on this solemn occasion.

We have the honor to place in the hands of your excellency official letters signed by the President of Guatemala which appoint us as envoys extraordinary and ministers plenipotentiary on special mission to the worthy Government of your excellency.

President Wilson replied as follows:

GENTLEMEN: It affords me sincere pleasure to receive you and to accept from your hands the letters by which his excellency the constitutional President of Guatemala has accredited you as envoys extraordinary and ministers plenipotentiary on special mission, to offer me his congratulations on account of my election as President of the United States, and to be present as his representatives at the ceremonies attending my inauguration.

I shall be glad if you will convey to his excellency the assurances of my profound appreciation of his congratulations and good wishes, and if you will say to him that the friendly sentiments which he and the Government and people of Guatemala have so agreeably expressed through you are most cordially reciprocated by the Government and people of the United States and by me.

It is the earnest wish of this Government to avail itself of every proper means to perpetuate and strengthen the friendly relations which so happily exist between the Government of the United States and that of Guatemala, and I shall use every proper effort to accomplish whatever will promote their mutual interests.

I offer through you to his excellency my best wishes and those of the Government and people of this country for his health and happiness, the welfare of his Government, and the peace and prosperity of the people of Guatemala.

PAN AMERICAN NOTES



THE Director General of the Pan American Union, the Assistant Director, and the members of its staff take advantage of this opportunity to present their compliments to the new chairman of the Governing Board, the Secretary of State of the United States, Hon. William J. Bryan, and to express the hope that in his official capacity he will continue to show the same interest in the work and welfare of this organization which he has always done as a private citizen.

On the walls of the office of the Director General hangs a portrait of Mr. Bryan which carries under it his famous autographed sentiments:

To the South American Republics: "The Lord has made us neighbors; let justice make us friends. W. J. Bryan." December 25, 1908.

Those remarkable words which have been repeated all over the world, and which now have special significance as Mr. Bryan becomes Secretary of State and chairman of the Governing Board of the Pan American Union were written five years ago, prior to the notable journey which he made to South America. His interest, therefore, in that part of the world is not of recent development, and it has, as shown by his various writings and speeches, grown with the passing years until now it will reach its climax in his new post of vast responsibility.

It is not the purpose of this article to review the new chairman's life. The principal events in it are too well known to everybody to need repetition. If, however, anyone should wish to familiarize himself with Mr. Bryan's attitude toward Latin America and his actual familiarity with the countries of that section of the world, he should read the articles which appeared in the *Commoner* in 1910, following his visit to various Latin-American countries. An inspection, moreover, of the files of the Latin-American newspapers during his trip, which took place in the early part of 1910, reveal the deep impression he made upon the statesmen and peoples of the countries visited and make his journey stand out as second only in importance to the famous one made in 1906 by Hon. Elihu Root as Secretary of State of the United States.

On Thursday evening, March 13, the Director General gave a dinner in the "Hall of the Americas" in the Pan American Building in honor of the new chairman of the Governing Board and Mrs. Bryan. The guests invited to meet them included the Latin-American ambassa-



HON. WILLIAM JENNINGS BRYAN

Secretary of the United States and President of the American Union of Free Trade Unions

dors and ministers and their wives. On this occasion the Brazilian ambassador, Senhor Domicio da Gama, at the request of the Director General, delivered a cordial address of welcome to the new Secretary of State and chairman of the governing board. Secretary Bryan responded in a felicitous and sympathetic speech. After the dinner an informal reception was held, when the secretaries and their families of the Latin-American embassies and legations were also presented to Mr. and Mrs. Bryan.

PAN AMERICAN SOCIETY OF THE UNITED STATES.

Special credit is due Frederic Brown for his work as secretary-treasurer of the Pan American Society of the United States in building up and in making its first year a notable one of achievement and progress. It must be gratifying to Mr. Brown that the society as a whole stands back of him and applauds him for his efforts to make it a real factor in the development of friendship and better acquaintance between the people of the United States and the peoples of our sister American Republics.

A careful reading of the report which he submitted at the annual meeting of the society on the 10th of February, 1913, can not fail to please all those who are sincerely interested in the welfare of the organization. When it was first started a year ago it had a membership of a trifle over 100. It has now passed the 400 mark. Of this number, 36 are life members. A special handbook on Latin America was prepared by the secretary, which has been well received by the membership and by the press of Latin America. The society arranged for several important dinners and luncheons to eminent Latin Americans, which were well attended. It arranged for special events when the Latin-American countries were discussed or when prominent Latin Americans have delivered addresses. The very successful banquet held last year by the society in honor of the Governing Board of the Pan American Union, which was attended by 500 leading men of New York, is pointed out as an example of what should also be done the coming year when the new Secretary of State, as chairman ex-officio of the Governing Board of the Pan American Union, comes into his duties. It has cooperated with the Mexico Society in matters that pertained to that interesting country. The Secretary has met upon their arrival numerous prominent Latin Americans and has shown them whatever courtesies were in his power, which have been much appreciated. At the present time he is preparing a bibliography of books on all sections and phases of Latin American affairs for the use of those who wish to be better informed about the American Republics. In a short time the first yearbook of the society will be issued.

In discussing the future usefulness of the society the secretary recommends that it should do all it could to promote the study of



SEÑOR LIC. JOSÉ RODRÍGUEZ CERNA,

Secretary of the International Bureau of Central America, at his office, Guatemala City, Guatemala.



RECEPTION HALL OF THE INTERNATIONAL BUREAU OF CENTRAL AMERICA, AT
GUATEMALA CITY, GUATEMALA.

Latin American countries and the Spanish and Portuguese languages in the universities, colleges, and other schools of the United States, and thinks it would be a good plan to offer medals, prizes, or decorations to those citizens of any of the American Republics who shall during the year produce any noteworthy work or perform any special service in the cause of Pan Americanism. From time to time Mr. Brown has delivered addresses here and there on the Latin-American Republics, which have been highly praised by the newspapers of the cities which he visited.

In his report upon the receipts and expenditures he calls attention to the fact that the total receipts amounted to \$7,234.14. The total expenditures were \$5,803.04, leaving a cash favorable balance of \$1,431.10.

DOUBTFUL SCHEMES IN LATIN AMERICA.

It is necessary as a precaution to the public that the Pan American Union should repeat the warning which it has published many times before in the BULLETIN against foolish mining, land, and other development schemes located in Latin America. These are advertised in newspapers of the United States or promoted by misleading circulars for the sake of making money for the promoters and which are, in fact, of doubtful value. A great many persons are complaining to the Pan American Union that they have invested money in this and that undertaking in the southern republics which has brought no return. They seem to have the opinion that just because the investment was in that part of the world it ought to return great profits, forgetting that all over the United States innumerable schemes have been started for making money in this country which had no solid backing or real potentialities. The same care must be exercised about investing money in Latin America as in the United States, Europe, or Asia, and we advise everybody to go slow until they are absolutely convinced of the worth of the undertaking which attracts their attention.

DEATH OF SR. DON FELIPE CARBO.

It is a sad duty to record in the annals of Pan American affairs the sudden demise of another of its ardent workers, Señor Don Luis Felipe Carbo, which occurred in New York on the morning of February 25, 1913. Señor Carbo was twice minister of Ecuador to the United States, and also represented his country as delegate to the Second Pan American Conference in Mexico. Of a conciliatory and kindly nature, he constantly exerted his best efforts for the promotion of Latin-American affairs, and while a member of the governing board of this organization manifested the keenest interest in its work and success. Sr. Carbo also served his country with much credit in various important posts at Quito, as well as abroad, and his death is lamented by all those who knew and admired him.



Photography by Harris Ewing

FRED MORRIS DEARING, ESQ.

Assistant Chief of the Division of Latin-American Affairs, Department of
State, at Washington.

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SULLI LOW FREQUENCY LIMIT 159

Assistant Chief of the Division of Latin-American Affairs, Department
of State, Washington

NEWSPAPER ATTENTION TO LATIN AMERICA.

It is especially gratifying to note the increased attention which the New York newspapers are giving to the Latin-American countries, largely as a result of the efforts of the Pan American Union and the data which it provides. They publish now more in one month than they did formerly in a whole year. The amount of space the Sun, Times, and Herald are giving to matters pertaining to the commerce and progress of these countries is indeed gratifying and will add greatly in awakening an appreciation throughout all United States of the products and resources of Latin America.

SPECIAL LATIN-AMERICAN PHOTOGRAPHS.

In one of the rooms of the Pan American Union there have been hung seven large photographs of remarkable cities and scenes in Latin America taken by the well-known photographer, Mr. I. E. Scheeler, of Philadelphia, Pa. These are the largest individual photographs which have ever been taken of the places which they reproduce and give an excellent idea of them which could only be obtained by actual travel and looking upon them. Mr. Scheeler has met with such success in this kind of photography that he is now returning to South America to take more views, including the famous Iguazu Falls.

PAN AMERICAN REPRESENTATIVES IN LATIN AMERICA.

The Pan American Union is receiving interesting reports from two members of its staff who are making a very careful tour of South America, Dr. Albert Hale and Charles E. Babcock. The former is now on the west coast returning northward and will probably reach Washington in April. The latter is at the present time in the Argentine Republic, having just completed a considerable stay in Brazil. They report that everywhere there is a growing interest in the Pan American Union and wider appreciation of its practical usefulness as an international bureau of information.

BRAZILIAN BUREAU OF INFORMATION IN CALIFORNIA.

The Pan American Union is interestingly notified by Dr. Eugenio Dahne, commissioner general representing the Brazilian Ministry of Agriculture in the United States and Canada, of the establishment under his charge of a Bureau of Information on Brazil in San Francisco. He says that already he has received the hearty cooperation of the Chambers of Commerce of San Francisco, Los Angeles, and San Diego, and that they will probably send a delegation to represent them at the opening of the Brazilian National Exposition at Rio de Janeiro next May. Mr. James Slanson, former president of the Chamber of Commerce of Los Angeles, will probably head this delegation. Mr.



Journal of Management Inquiry 20(4)

$$111 \leq s_1 \leq 114, \quad \forall (111 \leq i \leq N-1) \leq s_i,$$
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Dahne also calls attention to the remarkable increase of coffee received by sea at San Francisco. In 1911 the total number of bags arriving by water was 12,303, while in 1912 the number increased to 54,147. The director general of the Pan American Union wishes every success for this new bureau.

THE VENEZUELAN TARIFF.

Judging from the many orders which the Pan American Union is receiving for copies of the Venezuelan tariff, this pamphlet is apparently filling a long-felt want. Compiled under the direction of this institution, it contains in its 60 pages a comprehensive statement covering appraisements and duties on commodities imported into that country and is proving indispensable to business firms conducting a foreign trade. The favorable reception accorded the former publications on the tariff of Argentina and Bolivia, published under our auspices, has encouraged the continuance of this particular work, which is regarded as of great practical use and value. Copies of this booklet can be obtained at the cost of publication, 25 cents.

VIEWS OF SECRETARY KNOX'S JOURNEY.

The director general of the Pan American Union expresses thanks to Philander Chase Knox, jr., for an album containing a remarkable series of photographs taken by him of scenes in the journey made by his distinguished father, Secretary Knox, to the countries of the Caribbean in February, March, and April, 1912. This group of photographs will be a valuable addition to the collection of views in the possession of the Pan American Union and has already been much enjoyed by those who have inspected it.

MR. HARDEE AND THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

Congratulations are extended by the director general of the Pan American Union to Theodore Hardee, chief of the department of liberal arts, Panama-Pacific International Exposition. His selection for that responsible position is deserving and appropriate. Few men to-day have a wider knowledge of the whole world and are more familiar with expositions than Mr. Hardee. He was the secretary of Director General Barrett when the latter made a tour of the world in 1902 as the commissioner general of the St. Louis World's Fair. Later he held a most responsible position at St. Louis and then was prominently identified with the Lewis and Clark Exposition at Portland, Oreg. From the start he has been one of the chief promoters of the great exposition at San Francisco, and he is sure to be a strong factor in its success. Incidentally he is deeply interested in the Latin-American countries and is planning to do everything he can to make their exhibits appear to the best advantage.



Photograph by Lewis & W.

THEODORE BARLETT 1892.

Chief of Department of Labor, Army, Bureau of Labor Statistics,
Inspector San Francisco, Cal., 1892.

VISIT OF DR. AGUILAR.

There has recently been visiting in the United States, Dr. Romauldo Aguilar, a distinguished jurist and member of the legal faculty in the University of Cuzco, Peru. The prime object of Dr. Aguilar's tour through the principal cities of this country was to observe and study the structure and operation of the representative museums with the view of recommending to the Government of Peru the establishment of a similar institution in the city of Cuzco, the famous center of Incan and pre-Incan antiquities. Dr. Aguilar's reputation as an archaeologist and his valuable contributions to the literature on Peruvian antiquities render him eminently fitted for the important mission intrusted to him. While in Washington the Pan American Union was pleased to receive the doctor and to extend to him the courtesies of the institution.

CONVENTION OF ADVERTISING MEN.

The various committees having in charge the arrangements for the ninth annual convention of Associated Advertising Clubs of America, which will be held at Baltimore, Md., June 8-13, are deserving of special congratulations for the splendid efforts which they are exerting to make this gathering one of the most notable in the history of commercial publicity. The convention will bring together the leading advertising men not only of the United States, but also of Latin America and Europe, and the interchange of ideas in this important branch of endeavor by men who are leaders in their respective countries can not fail to have a far-reaching effect. The convention will afford the opportunity to those in attendance to increase their general acquaintanceship with world advertisers and learn at short range much about the personnel of the men handling the heavy advertising of the United States and of other countries in its various forms and to compare prices and value of advertising media. Mr. Herbert Sheridan, the chairman of the foreign-representation committee, is strongly encouraged by the numerous acceptances from foreign delegates to attend this gathering, and it is gratifying to note that the countries of Latin America are manifesting a high appreciation of the importance of this gathering.

STATUE OF GEN. DRAPER.

In this issue of the BULLETIN is published a photograph of the equestrian statue of Gen. William Franklin Draper, of the State of Massachusetts, presented to the town of Milford in that State by his widow, Mrs. Susan Preston Draper. This handsome statue is the work of the eminent sculptor, Daniel Chester French. It is of bronze and stands, with its pedestal, about 25 feet high. The reason



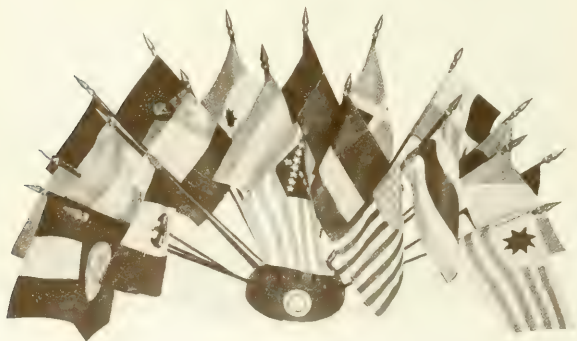
STATUE OF GEN. WILLIAM FRANKLIN DRAVTON.

GENERAL DRAVTON WAS BORN IN 1792, AND DIED IN 1865. HE WAS A MEMBER OF THE
 MARYLAND LEGISLATURE.

for its reproduction in the MONTHLY BULLETIN is that the Director General wishes to pay tribute to the memory of the man who took a great though quiet interest in Latin-American affairs and encouraged the director general in the reorganizing and building up of the Pan American Union at a time when he needed all the sympathy and support which he could possibly receive. In the dark days when the obstacles for the successful reorganization of the Pan American Union seemed almost unsurmountable Gen. Draper, with characteristic optimism and kindness, continually expressed an interest in its welfare which was most helpful. His widow, Mrs. Susan Preston Draper, and his daughter, Miss Margaret P. Draper, can well feel proud of this noble monument which will perpetuate his memory in his home town of Milford, where he was greatly honored and loved.

A SPECIAL HONOR TO THE PAN AMERICAN UNION.

The Texas Co., one of the largest firms in the country dealing in petroleum and its products, has informed the Pan American Union that it has decided to give the name of *Pan-American* to the biggest ocean-going tug on the west coast of the United States or the Gulf of Mexico, the largest launched by that company, and intended for the trade, under the United States flag, with Mexico, the West Indies, and Central America. In communications received from Mr. J. S. Cullinan, president, and Mr. Arnold Schlaet, vice president, of the Texas Co., the Director General is informed that the name of *Pan American* is given to this boat in honor of the work being done by the Pan American Union for the development of closer relations of trade, commerce, and friendship between the United States and its sister Republics.



SUBJECT MATTER OF CONSULAR REPORTS

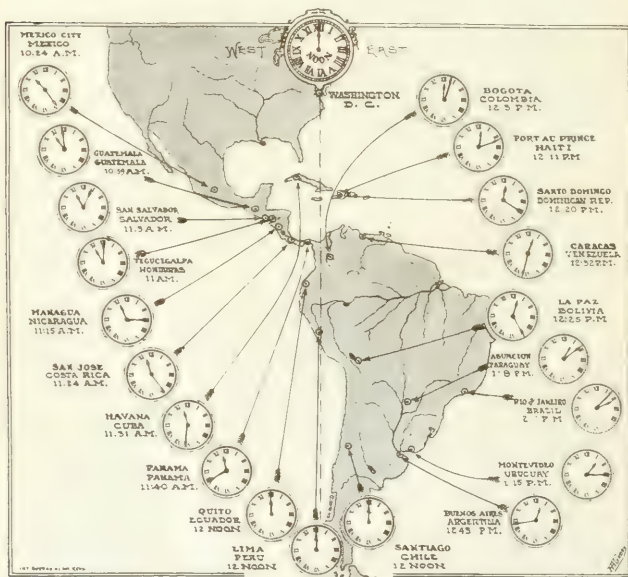
REPORTS RECEIVED UP TO MARCH 1, 1913.

Title	Date	Author
ARGENTINA		
"Look-out" of the River Plate	1912.	
	Dec. 27	R. M. Bartleman, consul general, Buenos Aires.
Argentine Republic in 1912	1913.	Do.
Notes from Argentine: River-side Avenue: Building and construction: Banking: Tobacco: Industry: Drainage: work: Highway	Jan. 27	Albert C. Ebert, vice consul general, Buenos Aires.
New paper: Building of River-side Avenue: Buenos Aires	Jan. 28	R. M. Bartleman, consul general, Buenos Aires.
CHILE		
Production of materials in Chile	Jan. 14	Alfred A. Warkow, consul, Valparaiso.
Builder's hardware	Jan. 27	Do.
CUBA		
Methods of entering Cuban market	Jan. 14	Homer P. Starnett, consul general, Havana.
ECUADOR		
Paper	Jan. 31	George D. Hedran, consular agent, Esmeraldas.
No market for lumber	do	Do.
GUATEMALA		
Scales imported into Guatemala, 1911—duty	Jan. 28	George A. Bucklin, consul general, Guatemala.
Lighting apparatus	do	Do.
Lighting systems, etc.	do	Do.
Market for varnish, stain, and paints	Jan. 30	Do.
MEXICO		
No market for electric lighting and heating apparatus	Jan. 29	Warren W. Rich, vice consul, Salina Cruz.
Woodworking machinery in use in factories	Jan. 30	Wilbert L. Bonney, consul, San Luis Potosi.
No market for lighting apparatus	do	Do.
Supplemental report on commerce and industries, 1912.	Jan. 29	Wm. E. Alger, consul, Mazatlan.
Local regulation for commercial travelers	Feb. 4	Wilbert L. Bonney, consul, San Luis Potosi.
No market for lighting and heat	do	Clarence A. Miller, consul, Tampico.
Mazatlan items	do	Wm. E. Alger, consul, Mazatlan.
Electric lighting	Feb. 7	Wm. E. Alger, consul, Salina Cruz.
No market for telephone and auto supplies	do	Do.
No market for fishing tackle	do	Do.
Market for automobile tires	Feb. 7	Wilbert L. Bonney, consul, San Luis Potosi.
Lighting apparatus	Feb. 7	J. W. German, vice consul, Progreso.
Notes on commerce and industries, 1912	Feb. 7	Lucien H. Sullivan, consul, La Paz.
Banks and banking in Mazatlan, Sinaloa	do	Wm. E. Alger, consul, Mazatlan.
Annual report of commerce and industries of Aguascalientes consular district for calendar year 1912.	Feb. 11	Gaston Schmutz, consul, Aguascalientes.
Agricultural implements in Sinaloa	do	Wm. E. Alger, consul, Mazatlan.
Mazatlan notes: Civil hospital; municipal taxes	Feb. 12	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America but merely those that are supplied to the Pan American Union as likely to be of service to this organization.

Reports received up to March 1, 1913—Continued.

Title.	Date.	Author.
PARAGUAY		
Agricultural implements.....	1913 Jan. 9	Cornelius Ferris, Jr., consul, Asuncion.
Malaria remedy.....	Jan. 10	Do.
Reduction of import duty on cacao.....	Jan. 14	Do.
Shoe-trade in Paraguay.....	Jan. 16	Do.
Lumber industry.....	Jan. 21	Do.
PERU		
Exports from Port to United States, 1910-1912.....	Jan. 25	Louis G. Previus, vice consul, Callao.
URUGUAY		
State of Uruguay banking, November, 1912.....	1912. Dec. 2	Frederic W. Gueding, consul Montevideo.
Foreign Commerce of Uruguay, year 1912.....	1913. Jan. 4	Do.
Uruguay notes.....	Jan. 10	Do.
Corsets.....	Jan. 21	T. W. Voetter, consul, La Guaira.
Maracaibo coffee crop for 1912.....	Jan. 25	John A. Ray, consul, Maracaibo.
Shipbuilding at national navy yard at Puerto Cabello.....	undated	Herbert R. Wright, consul, Puerto Cabello.
Motor boats and motor cars.....	Feb. .	T. W. Voetter, consul, La Guaira.

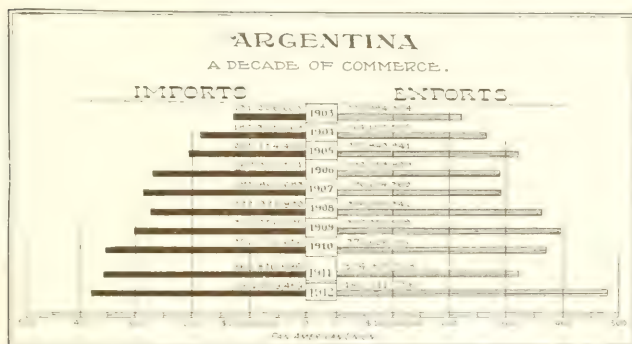


ARGENTINE REPUBLIC

COMMERCE OF THE ARGENTINE REPUBLIC FOR 1912.

The Pan American Union is able to publish, from advance data furnished by the General Office of Statistics of Argentina, a synopsis of the foreign trade for the calendar year 1912. This data shows the most remarkable increase in foreign trade that has ever occurred in the history of Argentine commerce, both in imports and exports, particularly in exports, exceeding by a large percentage the trade of any preceding year.

The total foreign trade of the Republic for the year 1912 was 865,244,725 pesos gold, of which 384,853,469 pesos represented imports and 480,391,256 pesos exports. The figures for the preceding year (1911) were: Imports 366,810,686 pesos; exports 324,697,538 pesos; total 691,508,224 pesos. There was, therefore, an



increase in imports of 18,042,783 pesos, and in exports of 155,693,718 pesos, or nearly 48 per cent — an increase in total trade of 173,736,501 pesos, or over 25 per cent.

These figures do not include the coin imports and exports, of which the former amounted to 36,077,807 pesos, and the latter to 585,621 pesos.

In terms of United States gold, the Argentine peso is worth commercially about 97 cents. At this rate the foreign commerce for the year 1912 amounted to \$839,287,383, of which \$373,307,865 was imports, and \$465,979,518 was exports; and for the preceding year (1911) to \$679,762,977, of which \$355,806,365 was imports, and \$314,956,612 was exports.

The following table shows the foreign commerce of Argentina for the last 10 years:

Years.	Imports.	Exports	Years.	Imports.	Exports.
	<i>Pesos.</i>	<i>Pesos.</i>		<i>Pesos.</i>	<i>Pesos.</i>
1903.	131,206,600	220,984,524	1908	272,972,830	366,005,341
1904.	187,305,969	264,157,525	1909	302,756,095	397,350,528
1905.	205,154,420	322,843,841	1910.	351,770,656	372,626,055
1906.	269,970,521	292,253,829	1911.	366,810,686	324,697,538
1907.	285,860,683	296,204,369	1912	384,853,469	480,391,256

The imports for 1910, 1911, and 1912, from the leading commercial countries were:

	1910	1911	1912
	<i>Pesos.</i>	<i>Pesos.</i>	<i>Pesos.</i>
United Kingdom.	109,377,394	108,637,430	118,669,226
Germany.	61,128,888	65,862,211	63,941,503
United States.	48,418,892	52,553,390	59,126,951
France.	33,650,640	38,026,555	37,618,578
Italy.	31,776,115	29,345,979	32,487,452
Belgium.	19,598,982	19,485,211	20,370,530
Spain.	10,910,940	11,279,465	11,928,407
Brazil.	9,103,594	8,461,416	9,547,236
British possessions.	5,950,806	4,494,886	6,093,128
Austria-Hungary.	3,466,115	4,304,114	3,476,805
Netherlands.	2,517,189	2,977,739	3,441,667
Uruguay.	2,262,394	3,069,648	2,496,913
Sweden.	1,291,049	1,666,645	2,290,206
Canada.	2,577,506	2,883,761	2,266,257
Switzerland.	2,521,594	2,867,224	2,183,400
Paraguay.	1,354,777	2,961,393	2,127,506
Total of all countries.	351,770,656	366,810,686	384,853,469
In United States gold.	\$441,217,536	\$355,806,365	\$373,307,865

The following table shows the imports for 1912 and the two preceding years under 19 major classifications:

	1910	1911	1912
	<i>Pesos.</i>	<i>Pesos.</i>	<i>Pesos.</i>
Live animals.	964,442	521,530	558,975
Food products.	27,141,259	29,336,767	30,140,447
Tobacco.	6,081,719	5,891,805	7,594,968
Wines, liquors, and other beverages.	14,951,151	13,799,170	14,677,392
Textiles and manufactures thereof.	68,365,167	69,698,095	78,370,463
Oils, grease, etc.	13,892,439	15,890,464	18,446,032
Chemical and pharmaceutical products.	12,289,907	12,178,274	14,281,226
Paints, dyes, etc.	2,305,042	2,444,818	2,515,287
Timber, woods, straw, and manufactures thereof.	8,670,726	10,400,579	9,888,377
Paper and manufactures thereof.	8,307,701	8,669,980	9,866,902
Hides, skins, and manufactures.	3,075,615	3,597,784	3,903,152
Iron, steel, and manufactures.	43,119,488	43,085,741	45,997,642
Other metals and manufactures.	12,870,455	15,479,686	14,366,709
Agricultural implements and machinery.	18,921,823	13,692,372	12,522,048
Transportation: Railway cars, equipment, rails, etc.			
carriages, wagons, automobiles, bicycles, etc.	35,095,183	36,865,379	32,798,668
Earths, stones, coal, etc.	30,925,510	33,202,076	33,617,226
Building materials.	29,237,334	33,789,444	31,265,467
Electrical apparatus.	5,741,530	6,683,673	9,308,785
Miscellaneous.	9,814,165	11,583,049	14,704,003
Total.	351,770,656	366,810,686	384,853,469
In United States gold.	\$441,217,536	\$355,806,365	\$373,307,865

The total of dutiable imports in 1912 was 292,278,465 pesos, and of duty-free imports, under general or special law, 92,575,004 pesos.

The exports by principal countries of destination for the last three years were as follows:

	1910	1911	1912
	<i>Pesos.</i>	<i>Pesos.</i>	<i>Pesos.</i>
United Kingdom.....	88,767,483	91,841,231	121,373,358
Germany.....	1,794,817	43,073,014	53,995,175
Belgium.....	30,480,743	30,926,005	37,258,225
France.....	37,761,712	30,987,434	36,052,009
United States.....	7,375,591	21,300,001	32,391,148
Brass.....	17,115,699	11,874,096	22,646,362
Italy.....	10,474,862	15,388,063	21,147,962
Netherlands.....	3,780,008	6,416,199	16,027,223
Denmark.....	1,000,967	2,340,913	4,714,480
Spain.....	2,870,077	2,177,729	3,582,405
Australia and Hungary.....	1,867,703	2,398,076	2,836,798
Chile.....	2,706,596	-	2,456,280
Buenos Aires.....	578,478	782,467	930,384
South Africa.....	900,594	970,158	147,128
Other countries.....	103,783,235	9,457,096	114,903,510
Total of all countries.....	371,620,000	324,697,538	480,391,256
In United States.....	\$9,447,777	\$31,600,011	\$465,979,518

Nearly all the "on order" shipments ultimately reached the western European countries and in about the same proportion as the direct shipments to these countries as given in the table.

The following table shows the exports for 1912 and the two preceding years under 6 major heads:

Articles.....	1910	1911	1912
	<i>Pesos.</i>	<i>Pesos.</i>	<i>Pesos.</i>
Live animals and meat products.....	161,006,500	168,394,777	188,215,976
Agricultural products.....	196,781,019	139,764,786	278,186,777
Forest products.....	10,564,577	12,254,604	8,983,112
Mining products.....	500,000	300,000	800,000
Handicraft and textile.....	1,428,884	1,600,000	1,008,717
Miscellaneous.....	2,504,500	-	-
Total.....	372,285,480	321,060,167	480,391,256
In United States.....	\$9,447,777	\$31,600,011	\$465,979,518

A report has been submitted to the department of agriculture of Argentina by the director general of rural statistics and economy, showing the following estimates of WHEAT, LINSEED, AND OATS produced in that Republic during the harvest of 1912-13: Wheat, 5,400,000 tons; linseed, 1,130,000 tons; and oats, 1,682,000 tons. A comparison of the foregoing figures with the following figures for the previous season of 1911-12 shows a large increase in the harvest of 1912-13: Wheat, 4,523,000 tons; linseed, 572,000; and oats, 1,004,000 tons. The production in 1912-13, by Provinces, was as follows: Buenos Aires: Wheat, 1,995,000 tons; linseed, 300,000; oats, 1,431,000. Cordoba: Wheat, 1,460,000; linseed, 230,000; oats, 30,000. Santa Fe: Wheat, 905,000; linseed, 380,000; oats, 40,000. Central Pampa: Wheat, 700,000; linseed, 11,000; oats, 81,000. Entre Rios: Wheat, 255,000; linseed, 205,000; oats, 75,000. Other Provinces and Territories: Wheat, 85,000; linseed, 4,000; and oats, 25,000.

tons. During the last five years the production of cereals in Argentina was as follows: 1908 9: Wheat, 4,250,000 tons; linseed, 1,049,000; oats, 464,000. 1909 10: Wheat, 3,566,000; linseed, 717,000; oats, 530,000. 1910 11: Wheat, 3,975,000; linseed, 595,000; oats, 686,000. 1911 12: Wheat, 4,523,000; linseed, 572,400; oats, 1,004,000. 1912 13: Wheat, 5,400,000; linseed, 1,130,000; oats, 1,682,000. The area sown to cereals during the season of 1912-13 is estimated as follows: Wheat, 6,918,450 hectares; linseed, 1,733,330; oats, 1,192,000. Based on these estimates, the average yields per hectare in 1912-13 were as follows: Wheat, 785 kilos; linseed, 1,534 kilos; and oats, 709 kilos. —An offer has been made by the constructors of the port of Rosario to build the Cadillal Dam, an IRRIGATION RESERVOIR planned to be constructed north of the city of Tucuman, at 9 per cent more than the official estimate of the cost of construction in accordance with the plans and specifications furnished contractors for the purpose of receiving tenders. The Government engineer in charge of the construction of the dam has recommended that the offer be accepted. The press of Buenos Aires reports that Dr. Luis Drago, an eminent Argentine jurist and author of international reputation, will visit the United States in April next, on the invitation of the American Government. Dr. Drago will deliver a series of lectures in the United States. — A cooperative society has been organized in Mendoza under the name of "Fruticola Mendocina," the special object of which is to increase the FRUIT SHIPMENTS of that Province by opening up markets in Buenos Aires and other commercial centers of the Republic. The railway company is cooperating with fruit growers in furnishing increased and improved facilities for shipping fruit to markets, so that it will arrive quickly and in good condition. Cold-storage plants and refrigerator cars are to be employed in this service, and refrigerator cars containing shipments of perishable fruits will be attached to fast trains to facilitate rapid handling and transportation to markets. — A proposal has been made to the provincial government of the Province of Mendoza to assist in the construction of the Rosario to MENDOZA RAILWAY by acquiring shares and obligations to the amount of 3,600,000 Argentine gold pesos. The proposal also includes the establishment of low freight rates on farm machinery and implements, and especially those used in the wine industry, with a 50 per cent rebate on return shipments of empty wine casks. The proposal submitted provides for a low rate of freight on building materials, such as cement, iron, lumber, lime, etc. The plan provides for the levying of a tax of 15 centavos per hectoliter of wine manufactured until such time as the interest and amortization of the 3,600,000 gold pesos referred to are liquidated. The soil of southwestern Argentina, in and around Roca Colony, is well adapted to FRUIT

GROWING by irrigation. Alfalfa also produces abundant crops in this region, records having been made of yields as high as 24 tons per hectare. Alfalfa also grows with great luxuriance at Cabo Alarcon in the region of the Limay River. In the neighborhood of Piedra del Aguila of this zone there are rich pasture lands which do not require irrigation. The assistant secretary of the department of agriculture of the Argentine Government, who is a practical agricultural engineer, recently made an extensive trip through this part of Argentina, and will make a detailed report to the department concerning the agricultural resources of the country. The number of immigrants entering Argentina in 1912 was 323,403, of which 165,662 were Spaniards, 80,583 Italians, 20,832 Russians, 19,792 Turks, 1,316 British, 858 Asiatics, and 499 North Americans.—The BUDGET for 1913, which was presented to the Chamber of Deputies, amounted to 322,814,473.06 pesos. The estimated revenues were 342,292,894.54 pesos.—The director of the census calculates, in round numbers, the POPULATION of Argentina on December 31, 1912, at 8,700,000 souls.—A CONGRESS OF SECONDARY EDUCATION, organized under the patronage of the minister of education, was held in Cordoba in February last.



The Federal Congress of Bolivia has authorized the President of the Republic to call for bids for the construction of a HIGHWAY between the cities of Totora and Vallegrande. The law provides for an appropriation for the construction of the road.—The 16 classes of STAMPED PAPER for use in Bolivia are of the following denominations: First class, 5 centavos; second, 10 centavos; third, 20 centavos; fourth, 30 centavos; fifth, 40 centavos; sixth, 70 centavos; seventh, 80 centavos; eighth, 1 boliviano; ninth, 2 bolivianos; tenth, 5 bolivianos; eleventh, 10 bolivianos; twelfth, 20 bolivianos; thirteenth, 25 bolivianos; fourteenth, 40 bolivianos; fifteenth, 50 bolivianos; and sixteenth, 100 bolivianos.—The Congress of Bolivia has provided funds for the following purposes: 3,000 bolivianos to publish the pedagogic and LITERARY WORKS of Mrs. Adela Zamudio; 4,000 bolivianos for the construction of a BRIDGE OVER THE MIZQUE RIVER at Pantoja on the road which leads through the Province of Campero into the Province of Vallegrande, and 6,000 bolivianos for protection work on the ROCHA RIVER in the city of Cochabamba. The time originally granted to the Electric Light

& Power Co. for the construction of TRAMWAYS in accordance with the law of January 5, 1910, has been extended for a period of 18 months. Construction work on the branch of the tramway to the Canton of Santa Ana de Calcala is to be commenced within six months under penalty of a forfeiture of the concession.—The Congress of Bolivia has authorized the President of the Republic to modify the contract made with Sr. Simon L. Patino on March 1, 1913, so as to permit the prolongation to Santa Cruz of the railway referred to therein. Five per cent interest is guaranteed by the Government for a term of 25 years on the capital invested in the prolongation of the line. The concessionaire is permitted to import free of duty the railway material and supplies required in the construction and operation of the railway for a period of 25 years, is granted freedom from the stamp tax, and 40 kilometers of Government lands in fee simple on both sides of the railway. At the close of 1912 the National College at Cochabamba had 465 matriculates, the American Institute 225, and the College of Law 73. Through the courtesy of Sr. Don Ignacio Calderon, minister of Bolivia in Washington, the MONTHLY BULLETIN has been furnished with information showing the exports of the port of San Francisco, Cal., to Bolivia in 1912, as follows: Total exports, 249,733 packages, weighing 9,424,770 kilos, and valued at \$344,183.36. The principal items of merchandise exported, in the order of their importance, were as follows: Flour, \$263,094.98; groceries and canned goods, \$30,989.04; lumber, \$20,973.07; tallow, \$10,861.71; shoe leather, \$2,398.81; malt, \$2,604; machinery and tools, \$1,276; hemp, \$851.89; cement, \$405; and sundry merchandise, not itemized, \$3,728.86. Sr. Adolfo Ballivian, consul general of Bolivia at New York, has compiled statistics showing that the EXPORTS FROM THE PORT OF NEW YORK to Bolivia in January of the present year consisted of 8,728 packages of merchandise weighing 517,142 kilos, valued at \$115,964.96. Of these shipments 31 packages of railway material, valued at \$4,374, entered the Republic without the payment of duties. The principal shipments, according to value, were as follows: Hardware, \$35,731.89; cotton goods, \$23,681.58; machinery, \$12,285.58; drugs and medicines, \$11,798.45; kerosene, \$7,050.50; and groceries, liquors, and miscellaneous articles, \$25,416.96. The three principal ports of entry were via Antofagasta, Chile, through the customhouses at Oruro and Uyuni, \$62,736.32; via Mollendo, Peru, through the Guaqui customhouse, \$32,797.68, and via Para, Brazil, through the Villa Bella customhouse, \$18,484.78. Small quantities of merchandise entered through the customhouses at Puerto Suarez, Tupiza, Tarija, and La Paz. ---Data recently published in the newspaper entitled "El Noroeste" of Riberalta, Bolivia, show that TEN LANDED PROPRIETORS in the Territory of Colonias own 10,597,000 hectares

of land, nearly all of which is uncultivated. One of these landowners has a tract comprising 7,034,000 hectares. A delegation of citizens has recommended that Congress levy a tax on uncultivated land, exempting a square league or 2,500 hectares from taxation, for the purpose of inducing owners of large tracts of unused lands to cultivate or dispose of them in small holdings. — It is claimed that if the plan for building a RAILWAY from Puno, Peru, around Lake Titicaca to La Paz, Bolivia, could be carried forward to completion, and at the same time a railway constructed from the Bay of Matarani, Peru, just north of Mollendo to connect with the Mollendo to Puno Railway, a very great reduction in freight rates could be made, and shipments could be billed direct to La Paz, Bolivia, in through cars at a great saving in time and cost of handling the merchandise. — The House of Deputies of Bolivia has approved the following measures: An increase of 2 per cent on the tax on indirect INHERITANCES; 20,000 bolivianos for the construction of a TELEGRAPH line from Quillacollo to Tapacari, and an increase in the tax on coca from Totora, the proceeds to be used for road repair. — According to the "Ferrocarril," a daily newspaper of Cochabamba, the Government of Bolivia expends annually 772,000 bolivianos in scholarships for the education of Bolivian youths abroad. — A STORAGE TAX (bodegaje) of 50 centavos on each international parcel-post package received in the post offices of the country became effective in Bolivia since the first of the present year. — A law of November 17, 1912, modifies the law of July 17, 1880, on INHERITANCE TAXES. During the last half of 1912 the earnings of the banks of Bolivia amounted to 533,309.08 bolivianos.

BRAZIL

Brazilian papers state that the Sao Paulo-Rio Grande Railway will purchase for the Parana Railway the following ROLLING STOCK: Twenty-five first-class passenger cars, 2 sleeping cars, 2 restaurant cars, 1 inspection car, 10 baggage cars, 150 closed goods cars, 350 platform cars, 10 Mallet locomotives, 10 ten-wheel locomotives. The total cost of these cars and engines will be about \$1,500,000 and the same report says that the President of the Republic has signed the decree authorizing the purchase. — According to telegraphic advices, the houses of N. M. Rothschild & Sons, and Baring Bros., of London, are forming a company for developing GOLD AND IRON MINES of Brazil, with a capital of \$100,000,000. This vast amount of money for development purposes, which will be conducted along conservative lines, means that a new era in mining is about

to be opened, which will be followed by commercial activity in numerous kindred lines. Mr. Cecil Baring, according to the same report, is now in Brazil and is studying the existing lines of railways and other means of transporting minerals. — Brazilian newspapers report the sale of the BAHIA-MINAS RAILWAY to the National Government for \$6,400,000; also the minister of finance has been authorized to purchase the Ferrocarril Vassourense, for which purpose the Government will issue bonds bearing the rate of 5 per cent per annum. The bonds will be guaranteed by the Government and will enjoy the same privileges as those now in circulation. — The antidrought department of the Government is CONSTRUCTING DAMS and other much-needed works which will make the land more productive in certain sections. Dams are to be built at Curaca and Joazeiro, the former situated 78 kilometers from the station of Jurema, on the San Francisco Railway, and will cost \$281,600. Dams to be erected at other important points are as follows: Ceara, Pao dos Ferros, Rio Grande, Apody, Monte Santo (Bahia), and Riacho do Sangue. The River San Francisco is to be dredged from its mouth to Piranhas, the estimated cost of which will be about \$32,000. — Mr. J. Simao da Costa, an experienced Brazilian industrial engineer, advocates the planting of RUBBER TREES, *hevea Brasiliensis*, on a large scale in some of the most suitable and accessible rubber districts of the Republic. On the subject of Brazilian rubber in general, the following interesting statistics from the Amazon Basin, via Para, during September and October of 1912 are published by the Board of Trade Journal, from the British acting consul at Para. The districts referred to include Para, Manaos, Iquitos, and Itacoatiara, and the previous year's figures are appended for the purpose of comparison. The total exports during September amounted to some 2,511,100 kilos (kilo=2.2 pounds), of which 1,241,600 kilos went to the United States and 1,269,500 kilos to Europe. Of the total amount, 1,367,600 kilos were comprised of fine rubber, 243,100 kilos of medium, 597,300 kilos of coarse, and 303,100 kilos of cauchó. A comparison with the corresponding month of 1911 shows a decrease in the total amount exported of about 541,600 kilos, which is solely accounted for in the figures relating to the United States, for whereas in 1911 the September exports to that country amounted to 2,043,600 kilos, they declined in 1912 to 1,241,600 kilos, or a drop of some 802,000 kilos. The European figures, on the other hand, show a considerable improvement at 1,269,500 kilos, against 1,009,100 kilos for the corresponding period of 1911. With regard to the month of October, a remarkable expansion is noticeable, and the total exports at 4,097,100 kilos show an advance of about 1,586,000 kilos over the preceding month's figures and 1,756,700 kilos over those for October, 1911.

The United States imports were during this month increased as compared with the 1911 figures by about 1,248,000 kilos and the European imports by some 508,800 kilos. Of the total October exports, 2,442,200 kilos were of fine grade, 355,000 kilos medium, 840,100 kilos coarse, and 489,800 kilos cañaho. It will be noticed from the above figures that whereas the exports for the two months under consideration in 1911 totaled 5,393,100 kilos, the 1912 figure stands at 6,608,200 kilos, or an increase of 1,215,100 kilos.



CHILE

Plans have been completed for the improvement of the potable WATER SUPPLY of Puerto Montt and Ancud, and an estimate has been prepared for the betterment of the water service at Molina. Plans have also been completed for the establishment of waterworks at Requinoa and Lebu.—RAILWAY ACTIVITY in Chile continues apace. Work has been commenced on the Quinteros to Nogales Railway, a private line which will connect the port of Quinteros with the town of Nogales. In January last work was begun on the Santiago to La Serena Railway. The board of public works has commenced a study of the project for the construction of a Trans-Andean Railway between San Bernardo and El Volcan and the Argentine lines, the estimated cost of which is 23,478,090 pesos. Construction work was completed on the Cerillo to Minerale de Bronces Railway in January last. Plans have been submitted to the board of public works for the construction of a railway from Traiguén to Boroa. The inauguration of the works of the Osorno to Puerto Montt Railway have been announced to take place in March, 1913. The sum of 300,000 pesos has been appropriated for the continuation of construction of the Alcones to Pichilemu Railway, and plans for building the Cauquenes to Chanco and Curanipe Railway have been completed. The railway from Cajon to Llaima has been opened to public traffic. Plans for the construction of a railway from Peralillo to Parronal have been submitted to the department of industry. The estimated cost of the line is 3,000,000 pesos. The Government has authorized the Cerillos Nitrate Co., at Antofagasta, to construct a branch line from Rioja on the northern section of the Longitudinal Railway to the Ercilla nitrate deposits. In December, 1912, the department of public works had 2,580 kilometers of railways, valued at 60,000,000 pesos, under construction. The Chilean Government has taken steps to acquire the Peralillo to Parronal Railway for the purpose of making it a part of the Longitudinal system. The cost

of the Cabras to Melipilla Railway is estimated at 3,934,103 pesos currency and 826,627 pesos gold. The Government of Chile has appointed Sr. Carlos Vattier to represent it at the INTERNATIONAL SMELTING CONGRESS, to be held in London in May, 1913. — The ASSAY OFFICE of the School of Mines at Santiago, has adopted the following tariff charges for analyses and assays: Complete quantitative analysis, 30 to 50 pesos; silver assay, 6 pesos; gold, 8; copper, 4; sulphur, 12; calcium, 10; iron, 8; and nitrate, 10 pesos. — A SCHOOL OF MINES has been established at Copiapo. Press reports state that after the completion of the Longitudinal Railway the Government will pay special attention to the mining industry. The new rules and regulations prepared by the bureau of inspection of the department of mines became operative in January last. — The department of public works of the Government of Chile has commenced the complete reconstruction of the WHARF at Coquimbo. The Patagonia Cold Storage Co. has been authorized to build a wharf 230 meters long at San Gregorio Bay, Magellan Territory. According to the budget the Government wharf at Arica will cost more than 3,500,000 Chilean gold pesos. Plans have been approved for the construction of a wooden and iron wharf at Antofagasta. The plans for the building of a wharf at Valdivia call for an expenditure of 156,000 pesos currency and 142,922 pesos gold. The sum of 30,500 pesos has been appropriated for the construction of a wharf at Taltal. — IRRIGATION WORKS have been undertaken at Coquimbo and in the Nilahue Valley. The latter place will be irrigated by the Mataquito Canal, the main line of which is 37 kilometers long. This canal will have two branches with a total length of 58 kilometers. The sum of 50,000 pesos has been appropriated for work on the Laja Canal. The Government has authorized Gibbs & Co. to build a canal from the Cuatin River to Temuco, and a plan is being considered for the irrigation of the Chacabuco Valley. — The city of Valdivia has been authorized to issue 8 per cent interest-bearing BONDS to the amount of 800,000 pesos, the proceeds of which are to be used in public improvements in that town. Punta Arenas is to establish a system of SEWERS, the use of which will be made compulsory. — Through the courtesy of the Chilean Legation in Washington the MONTHLY BULLETIN is informed that the Congress of Chile has approved the plan for the establishment of an AVIATION SCHOOL in that Republic, and has appropriated 700,000 pesos gold, of the value of 18d. each, for equipment and putting the school in operation. — The Errazuriz COAL MINES have been sold to the Los Rios de Curanilahue Coal Co. for £70,000. The new company proposes to develop and greatly increase the output of the mines. — The deposits of the NATIONAL SAVINGS BANK of Chile increased from 14,899,048 pesos in 1908

to 36,785,726 pesos in 1912. — A recent issue of "El Industrial," of Antofagasta, states that the Northern Longitudinal Railway will soon be completed. This railway is 719 kilometers long, 658 kilometers of which have already been built, and since the first of the present year more than 1,000 men have been working on the construction of the remaining 61 kilometers. It is estimated that the entire line will be opened to public traffic in March, 1913. — A decree of December 6, 1912, provides for the amortization of the 5 per cent INTERNAL DEBT of the Republic. — The LOAN of £200,000 made by the municipality of Vina del Mar has been negotiated by an English company at the rate of £90 5s. per £100. — The £100,000 5 per cent interest-bearing BONDS of the city of Concepcion, guaranteed by the Chilean Government, have been placed in London at par. — A report of the director of the Bureau of Statistics of the Chilean Government shows that there are 9,133,481 hectares of FORESTAL LANDS in the Republic, 3,756,681 of which belong to private persons, and 5,376,800 hectares to the State. The area in forests represents 12.06 per cent of the total area of the country.



The Secretary of Foreign Relations of Colombia has requested the other cabinet officers and the governors of the respective States to send to his office statements of any important events occurring in the Republic which might be of interest abroad so that he may furnish them to the FOREIGN PRESS AGENCY in Colombia. The Federal Government has ordered all MANUSCRIPTS now in the National Library to be bound in order to facilitate the handling of same by the reading public. — The President of the Republic has contracted, through the department of home government, with the Telefunken Co. for the erection of a WIRELESS TELEGRAPH STATION on the San Andres and Providencia Islands at a cost of \$21,000. The station is to be completed within five months. The Government proposes to construct wharves, erect lighthouses, and make other improvements on the islands referred to. — In 1912 there were 3,333 births, 3,209 deaths, and 582 marriages at Bogota. A decree has been issued by the President of Colombia adopting the convention of the International Postal Congress of Montevideo concerning POSTAL MONEY ORDERS and parcels post. A SCIENTIFIC EXPEDITION of a New York Museum and the Ornithologist Society of the United States, represented by Profs. Agassiz and Chapman, arrived in Colombia in February last en route.

the second time, for the Colombian Andes. Another expedition in charge of Prof. George R. Cherrie, of the Institute of Science and Arts of Brooklyn, is to follow the expedition referred to. Investigations will be made for a period of five months in the mountainous regions of Colombia and in the valley of the Orinoco. — A CATTLE COMPANY has been organized at Barranquilla, under the name of "Compañía Ganadera de la Costa," with a capital of \$150,000, gold. — On December 9 last the first AERIAL FLIGHTS were made in Colombia at Santa Marta, the aviator reaching an altitude of 1,000 meters. — The annual exploitation tax on the EMERALD MINES, amounting to \$60,000, has been changed to 10 per cent of the gross sales of emeralds extracted. — An AGRICULTURAL AND INDUSTRIAL FAIR will be held at Cauca on June 20, 1913. Awards will be made for exhibits of agricultural, industrial, artistic, and other products. — The exports of ALLIGATOR SKINS from Colombia to the port of New York is about \$62,000 annually. The cornerstone of the MAGDALENA UNIVERSITY has been laid at Santa Marta. — The National Bank at Barranquilla has lent the municipality \$30,000 for PUBLIC IMPROVEMENTS. — The Caqueta region is rapidly being COLONIZED, 160 colonists having recently arrived and it is reported that more are on the way. — A contract has been made with a navigation company for deepening the LEBRIJA RIVER which flows into the Magdalena. — In 1912 the imports of the port of Cartagena amounted to \$6,208,899, an increase of about 50 per cent over those of the previous year. — The best COAL deposits of the Republic are found in the Cauca Valley, the coal area being estimated at 10,000 kilometers and the amount of coal at 27 million tons. The Antioquia and Caldas coal fields represent an area of 500 kilometers and coal estimated at a million tons.



COSTA RICA

The Government of Costa Rica has granted a concession to Juan Chavez Rojas to enlarge the ELECTRIC LIGHT and power plant at Villa de Quesada. The power will be generated with water taken from the stream which runs through the San Pedro Canyon. The concession is valid for a term of 20 years. — The Pacific Railway has authorized a freight rate on COKE in carload lots, this commodity, which was formerly without classification, having been placed in class "B." The same railway has issued an order allowing a 25 per cent discount on the regular freight rate on flour imported through Puntarenas and shipped over the Pacific Railway in quantities of not less than 40,000 kilos per month. Formerly this dis-

count was only allowed when the daily shipments were not less than 20,000 kilos. — An executive decree of January 24, 1913, establishes a triweekly **POSTAL SERVICE** between Monte Redondo and La Legua, in the Canton of Asseri. — Permission has been given to Ricardo Dent Prieto to import into Costa Rica, within the next two years, not more than 500 European immigrants of both sexes, with the exception of Turks and gypsies, exclusively for domestic service. Contracts, subject to the approval of the department of fomento, may be entered into between the concessionaire and reliable persons desiring the services of the class of immigrants referred to. These immigrants are allowed free entry of baggage, chattels for personal use, and books and apparatus brought with them. Transportation over the Pacific Railway from the port of entry to the interior is also free. — The Government of Costa Rica has given permission to Sr. Hernan Cortes Castro, a Costa Rican citizen, to accept the appointment of **CONSUL OF ECUADOR** in Costa Rica. — Count Maurice de Perigny, a French explorer who has made extensive investigations and valuable reports relating to the ancient races of South America, has accepted the invitation of the Government of Costa Rica to study the prehistoric ruins of that country. — The **MERCANTILE BANK** at San Jose, Costa Rica, had on deposit at the beginning of the present year gold coin to the value of 1,374,448 colones. — The new **THEATER** at San Jose, Costa Rica, built by Eloy Gonzalez Frias and christened the "Modern Theater," is a three-story edifice, with seats distributed similarly to those of the celebrated National Theater of that city. The Modern Theater has a seating capacity for 1,200 persons, is elegantly furnished, and provided with all modern appliances with respect to ventilation, safety from fire, hygiene, etc. The theater is to be opened to the public in March, 1913. — The press of Costa Rica is discussing the manner of celebrating the **CENTENARY** of the founding of San Jose. The ancient titles of the present capital of the Republic were Villa Nueva and Villita, by which name it was known as far back as 1751. On October 16, 1813, the Spanish Cortes (legislature) gave it the name of San Jose. In 1815 the corner stone of the University of Santo Tomas was laid in the city of San Jose. The building is still extant and is now occupied by the School of Fine Arts, and the tax assessor also has his office there. — Sr. Fernando Cabezas, a Costa Rican engineer in the employ of the Government, has submitted a plan to the department of public works for the construction of a **HIGHWAY** from San Ramon to Rio Frio, a distance of about 80 kilometers. The opening of this road will greatly encourage and facilitate the development of a rich agricultural section of the country. The same engineer has completed the installation of **WATERWORKS** in the town of Coronado. The department of public works has also installed,

under the direction of Engineer Manuel Benavide, waterworks at Naranjo.—The Government of Costa Rica has appointed Sr. Sergio Alvarado Matarrita CONSUL GENERAL of that country in Paris, to take the place of the former consul general, recently deceased.

CUBA

The Official Gazette of February 3, 1913, publishes a decree concerning the delivery of promissory 6 per cent interest bearing notes of the Cuban Government for work done in connection with the WATERWORKS, SEWERING, AND PAVING of the city of Habana under an arrangement made in 1902, a complete and satisfactory settlement having been reached between the Government and the contractors. —At the celebration of the birthday of the Cuban patriot, José Martí, in Santiago on January 28 last, the Italian sculptor with whom a contract was made for the erection of 12 monuments to Cuban patriots in said city offered to make a BUST OF MARTÍ to be placed at the grave of that patriot in the cemetery at Santiago de Cuba. —The seventh annual meeting of the Cuban HORTICULTURAL SOCIETY was held in Habana from the 6th to the 9th of February, 1913. One of the important questions considered was the steps necessary to be taken to increase the commerce of Cuba with the United States in citrus fruits and vegetables.—The President of the Republic has appointed Judge Roberto Mendez Penate to be one of the salaried members of the ECONOMIC AND STATISTICAL COMMISSION recently created by an act of the Cuban Congress.—The city council of Habana has established the following annual tariff rates for COMMERCIAL AND PROFESSIONAL LICENSES necessary to be taken out in order to do business in the Federal capital: Cafés, \$200; café bars, \$175; grocery and wine stores, \$100; drug stores, \$200; boarding houses, \$100; confectionery stores, \$50; grocery stores, \$30; wholesale and retail merchants, \$150; lawyers and notaries, \$20; flower venders, \$10; boot-blacks, \$1; women and children's hat makers, \$5; scenery painters, \$10; cinematographs, \$50; delivery automobiles, \$5; and physicians, \$10. —A party of Harvard University naturalists, consisting of Drs. Wheeler, Barbour, Shaw, and C. de la Torre, recently made an expedition into the great Zapata swamp on the south coast of the Republic for the purpose of collecting SPECIMENS OF INSECTS, birds, reptiles and animals for the Agassiz Museum at Harvard University, Cambridge, Massachusetts. A fine lot of specimens were obtained, among which were several birds indigenous to the island. Sr. Fran-

cisco Morales, the engineer in charge of the Zapata Irrigation Works, rendered valuable assistance to the expedition by selecting and preparing a camp site on the edge of the swamp and by furnishing horses and supplies. — The health department of the city of Habana has adopted a plan by which customers may know where to obtain pure milk. MILK DEALERS who are known by the department to sell unadulterated milk are allowed to display a yellow flag, which means that repeated analyses of the milk sold by such dealers have found it to be pure. Dealers whose milk has to be inspected daily because of recent infractions of the law must use a red flag, meaning that the milk is not guaranteed, and a black flag displayed at milk shops indicates that the shop has been condemned because of repeated violations of the law. Venders of milk must pass an examination as to their health conditions. — The new plant of the CUBAN TELEPHONE CO., installed for service in the Cerro district, Habana, beyond Tulipan, was erected at a cost of \$75,000. The plant has a capacity for 4,000 subscribers, and is connected by direct trunk lines with Vedado, Regla, Guanabacoa, and Mariano. Under its concession of September 9, 1909, this company was authorized to install a long-distance telephone system connecting the 6 Provinces of the island, and was obligated to furnish telephone service to 93 cities specially mentioned. Up to the present time 72 of these cities have been furnished telephone communication, and telephone connection has been made with 42 other cities not specified in the contract. Over 1,200 kilometers of pole lines have been completed, and over 9,000,000 feet of No. 8 copper wire and 13,000,000 feet of No. 10 have been strung. Many sugar mills have been connected by telephone, and it is expected that a long-distance service will be opened between Habana and Santiago de Cuba in July next. At the close of last year the company had 11,889 telephones in operation. — A collection of CUBAN PRODUCTS has been placed on exhibition in the Cuban consulate at Santa Cruz, Canary Islands. — The SPANISH BANK has established a branch at Marianao, a city of 26,000 inhabitants near the city of Habana. — The NATIONAL MUSEUM was installed in Habana on February 24 last. The minister of Peru has presented the museum with a collection of Peruvian antiquities. — An ICE PLANT is to be installed at Nueva Gerona, Isle of Pines, under the management of Benjamin Haigh. — The fourth annual Isle of Pines Fair and HORTICULTURAL EXPOSITION was held at Santa Fe, Isle of Pines, from February 11 to 16, 1913, under the auspices of the Santa Fe Commercial Club. The fair was held in its own building and exhibits were made from every part of the island. — Sr. Carlos Herrera has been authorized to establish an ELECTRIC LIGHT and power plant at Limonar, Province of Matanzas, within one year from January 28, 1913.

DOMINICAN REPUBLIC

The President of the Dominican Republic has been authorized by the Dominican Congress, in accordance with the terms of the Dominican-American convention of February 8, 1907, to negotiate a LOAN for \$1,500,000 at an annual rate of interest not to exceed 7 per cent, the loan to be repaid, principal and interest, at the rate of \$30,000 per month. Negotiations for the placing of this loan were carried on by the Government with the Guaranty Trust Co., and the National City Bank, both of New York City, and the latter having made the best offer for placing the loan, the contract was made with that company. The negotiations on the part of the Dominican Government were conducted by Sr. S. Michelena, a banker of the city of Santo Domingo, and the loan was placed on the basis of 97½ per cent of its par value with an annual rate of interest of 6 per cent. The monthly payments of \$30,000 for the liquidation of the loan are to be deposited by the Government in the National City Bank of New York. —The "Central Romana," an incorporated agricultural company under the management of Mr. Van Alen Harris, has been authorized by the Government of the Dominican Republic to construct, maintain, use, and operate a WIRELESS TELEGRAPH STATION within the limits of the Central Romana property. The concession provides that the Dominican Government shall have the right to use this station gratis in case of urgency or whenever the Government deems advisable to do so. —The Diario Oficial of January 15, 1913, publishes the full text of the law governing the operation of MUNICIPALITIES in the Dominican Republic. —The ARBITRATION TREATY made ad referendum in the city of Mexico on February 22, 1902, between the delegates of the Second International Congress of American States representing the Governments of the Argentine Republic, Bolivia, Dominican Republic, Guatemala, Mexico, Paraguay, Salvador, and Uruguay, has been ratified by the Dominican Congress and duly promulgated by the President of the Republic. The full text of the treaty is published in the Official Gazette of December 21, 1912. —Licentiate Armando Rodriguez C. has been appointed ATTORNEY GENERAL of the Dominican Republic, and entered upon the discharge of the duties of his office early in January of the present year. President Nouel has also appointed Mr. Enrique Montes de Oca as Secretary of Agriculture and Immigration. —The Dominican SPORTING CLUB (Club Deportivo Dominicano) was organized on January 1 of the

present year. The officers of the club are as follows: Daniel G. Marcos, president; Miguel A. Caballero, vice president; Juan A. Senior, secretary, and Miguel A. Pardo, treasurer. — A NEW NEWSPAPER entitled "Prensa Nueva" (New Press) is being published in Azua under the direction of Abraham Ortiz Marchena. "El Imparcial" (The Impartial) is another new publication which has been issued at Moca. This paper will devote its activities to political and general news under the direction of Picardo Brache and Pedro M. German. — The Municipal Council of the city of Santo Domingo has approved the BUDGET for 1913. The public schools of the city have been well provided for in the budget, and a subvention has been granted to a school of music. The sum of \$50 is also given to a band of local musicians for musical concerts on Sunday afternoons in the city parks. An item of \$10,000 is also included in the budget for the repair of the municipal palace. Funds are liberally provided for the board of health of the Dominican capital, and \$12,000 is set aside for sundry expenses.



ECUADOR

The ad referendum agreement made at Caracas on July 17, 1911, between the representatives of Bolivia, Colombia, Ecuador, Peru, and Venezuela concerning LITERARY AND ARTISTIC PROPERTY has been approved by the Congress of Ecuador and duly promulgated by the President of the Republic. The public HIGHWAY from Guanujo to Ventanas is to be built by the municipality of Guarandana from funds obtained from a tax on aguardiente manufactured in Limon. The construction of this highway was begun under an act of Congress of February 16, 1907. The work will now be rapidly pushed forward to completion. — A HOSPITAL has been established at Portoviejo in an ancient building called "San Jose" in the suburbs of the town. The hospital will be under the direction of the board of charities of Portoviejo. For the support of the institution 5,000 sucres annually will be provided for in the budgets, the funds collected by the Red Cross Society of Portoviejo in 1910, the tax of 5 centavos on each liter of aguardiente manufactured or introduced into the canton of Portoviejo and gifts of private persons. — Henry Ford, of Detroit, Michigan, has applied to the Government of Ecuador for a patent on his invention relating to TRACTION ENGINES. The request is under the consideration of Government officials. — A society has been organized in Quito,

entitled "Orientales Ecuatorianos" (Ecuadorian Orientals), the object of which is to encourage the study of science, and the history and geography of that region. The organization will also assist in the establishment of missions and schools, aid in the opening of highways, other means of communication, telegraph lines, etc. Some of the special objects of the association are to further the construction of the Ambato to Curaray Railway and the Puerto Bolivar to Morona Railway. It is the intention of the society to study the manner of supplying immigrants and colonists to the regions which will be traversed by the railways referred to, encourage commerce and agriculture, and protect industrial concerns now established, or which in future may be established, in the Republic. The organization will give such aid as may be in its power in opening up the eastern part of Ecuador known as the "Oriente," and will endeavor to bring about a great improvement in the moral and material welfare of the inhabitants of that part of the country. —The Dupont Powder Co. of Wilmington, Delaware, has requested the Ecuadorean Government to register its TRADE-MARK, "Red Cross," used in the sale of certain explosives manufactured by that company. The Standard Oil Co. has also requested the registration of a trade-mark consisting of the letter "S," used in distinguishing some of the manufactured products of that company. — A silver and platinum MINE has been discovered in the eastern part of the Canagahua Parish, in the Province of Pichincha. The mine has been christened "La Concordia." —The ad referendum POSTAL AGREEMENT made at Caracas on July 17, 1911, between the representatives of the Governments of Bolivia, Colombia, Ecuador, Peru, and Venezuela has been ratified by Ecuador. —Juan Manuel Lasso has been appointed CONSUL GENERAL of Ecuador at New York, and Alberto Sandoval consul general in Venezuela. Carlos Billamarel has been appointed consul ad honorem at Iquique. —Dr. Alfredo Baquerizo M. has accepted the appointment of ARBITRAL DELEGATE of the President of the Republic in the Court of Arbitration, which will have cognizance of the pending questions between the Government of Ecuador and the Guayaquil to Quito Railway Co. —Dr. Cesareo Carrera has been appointed SECRETARY OF FOREIGN RELATIONS AND JUSTICE. —Dr. Rafael M. Arizaga, a distinguished Ecuadorian jurist and parliamentarian, has been elected a member of the AMERICAN INSTITUTE OF LAW. —The American Museum of Natural History of New York has sent Prof. Wm. B. Richardson to make a collection of the BIRDS AND MAMMALS of Ecuador and of other Latin-American countries. —The population of GUAYAQUIL has increased during the last 25 years from 40,000 to 75,000 inhabitants.

GUATEMALA

The President of Guatemala has appointed Sr. Carlos Meany as a delegate to the **FOURTH CONGRESS OF POPULAR EDUCATION** to be held in Madrid, Spain, from March 22 to 27, 1913. — The contracts made in London on December 5, 1912, by Sr. José María Lardizabal, chargé d'affaires of the Government of Guatemala in Great Britain, with three English professors, have been approved by President Estrada. One of these contracts was made with Mr. Walter Inge, who is placed in charge of the Estrada Cabrera Practical School for Boys in Guatemala City. Another was with Miss Jessie Eltringham, who takes charge of the Practical School for Girls in the Federal capital, and the third was with Mr. F. Alexander Montague, who is placed in charge of the English classes of the high schools of the city of Guatemala. — President Estrada Cabrera has appointed George N. Morang to represent the Republic of Guatemala at the twelfth meeting of the **INTERNATIONAL GEOLOGIC CONGRESS**, which will be held in Toronto, Canada, in August of the present year. — The **CENTRAL SOCIETY OF ARTISANS AND MUTUAL HELPERS** has arranged to publish a paper to officially represent the organization in its work in the Republic. — The **AMERICAN BANK** at Guatemala City has increased its capital 2,000,000 pesos, making the total capital of the institution at the present time 5,000,000 pesos. The balance sheet of this bank at the close of 1912 showed a profit of 736,264 pesos, which enabled the bank to pay a dividend of 160 pesos per share. Mr. Andrew Bickford is the manager of the institution, and his services were so highly appreciated during the past year that the board of directors of the bank gave him and his employees a substantial present. — One of the most notable **MONUMENTS** in the city of Guatemala is that erected to Gen. García Granados, head of the Guatemalan army in 1871 at the time of the fall of Justo Rufino Barrios. — An executive decree published in the official newspaper of Guatemala under date of January 8, 1913, authorizes the municipality of San Juan Sacatepequez to hold **ANNUAL FAIRS** in that town on the 5th, 6th, and 7th days of January of each year. The fair recently held from January 29 to February 2 was largely attended, and fine exhibits of stock, agricultural products, fruits, vegetables, poultry, farm machinery, etc., were made. Each year this fair is becoming more important because of the educational opportunities afforded exhibitors and visitors and on account of the friendly rivalry which it stimulates among stockgrowers.

farmers, horticulturists, and gardeners.—From the beginning of the present year the sum allotted by the Federal Government as a subvention for continuing the construction of the MUNICIPAL PALACE at Quezaltenango was increased to 1,000 pesos per month. Work is actively progressing on this building, and when completed it will be one of the finest municipal structures in the country.—An executive decree of December 23, 1912, provides that the SALAMA HOSPITAL shall continue to receive the tax of 6 centavos per bottle of San Geronimo aguardiente shipped to the department of Alta Verapaz.—A contract has been made by the department of fomento with the National Maritime Agency (Ltd.) to supply the customs building at the port of San Jose with the ELECTRIC LIGHTS for a period of two years, with the privilege of renewing the contract on its expiration if agreeable to both parties thereto.—The Fellows Medical Manufacturing Co. (Ltd.), with offices in New York City, has been granted two TRADE-MARKS by the Government of Guatemala covering the company's preparations for bronchial and lung affections.—The Western Clock Co. of Peru, Illinois, has been granted TRADE-MARK by the Government of Guatemala consisting of the words "Big Ben," which the company uses in distinguishing its manufactures from those of other companies.—The receipts and expenditures of the municipality of Totonicapan in October, 1912, were 16,923 and 7,132 pesos, respectively, which left an unused balance at the close of that month of 9,791 pesos.



HAITI

President Tancrede Auguste, realizing that the present WATER SUPPLY OF PORT AU PRINCE is a menace to the health of the inhabitants, issued a decree on January 8, 1913, authorizing a special appropriation of \$44,608 and 55,651 gourdes for tapping the streams of Bizotin and piping the water to the capital; and the repairing of the road made necessary by this work. The secretaries of finance and public works are to see to the immediate execution of the aforesaid decree.—MR. GEORGE AUDAIN, son of the well-known Haitian physician, Dr. Léon Audain, has been admitted as an interne in the hospitals of Paris.—Great interest is being shown in the EXHIBITION of the architects' plans submitted in the competition for the building of the National Palace, which competition was open to Haitian and foreign architects. The plans are on public exhibition in the House of Representatives and attract

many visitors. The cabinet officers, assisted by experts, will pass on the plans and the name of the successful competitor will be announced soon. — The COURSE OF LECTURES arranged by the Teachers' Associations in Port au Prince is proving very popular and all the lectures are well attended. The second lecture of the course was given by Dr. Carré, professor of physics in the Lycée Pétiou on the EDUCATION OF HAITIAN PEASANTS. — The "Moniteur Officiel" publishes the TRUANT LAW of the country and the school authorities give notice through its columns of their intention to see that it is rigidly enforced. Children found running or playing on the streets during school hours will be brought before the justice of peace who will immediately summon the persons responsible for the welfare of the children and call their attention to their duty in regard to the children under their care. In case of a repetition of the offense a fine of 5 gourdes will be imposed. If a child is absent from school eight consecutive days after the opening of the school term without valid reason a fine of 5 gourdes will be imposed. In case of repetition of the offense the fine will be doubled the second time, tripled the third, etc. In case the fine is not paid, the guilty party can be sent to jail from 5 to 10 days. — The CUSTOMS RECEIPTS OF PETIT-GOÂVE during the first three months of the fiscal year 1912 (October, November, and December), amounted to 111,492.62 gourdes and \$125,015.03. — The PLAINE-DU-CUL-DE-SAC RAILWAY COMPANY has published its report for the first six months of 1912, according to which 572,284 passengers and 14,278 tons of freight were transported, the total receipts amounting to 204,693.41 gourdes or \$1,774.75 gold.

HONDURAS

On January 1, 1913, President Manuel Bonilla delivered a MESSAGE to the National Congress, reviewing the events of the past year. The message states that Honduras maintains friendly relations with all nations, and especially with the countries of Central America. Within the past year the Government of Guatemala has established a legation at Tegucigalpa. The treaty of 1895 between Guatemala and Honduras concerning boundaries has, by mutual agreement, been extended until the 1st of March, 1914, during which time the mixed commission proposes to renew its work and complete the survey of the boundary line. The 5th of November, anniversary of the independence of the Central American Republics, the com-

tenary of which was celebrated on that date in Salvador in 1911, and in which Honduras participated through its legation in the city of San Salvador and by special delegates, has been made a legal holiday in the Republic of Honduras. The Government of Honduras will submit to the attention of the Congress the pending conventions approved or recommended by the Fourth Central American Conference. The Government has continued its support of the International Central American Bureau and the Central American Tribunal of Justice. The relations of the Government of Honduras to the United States of North America have been especially cordial, the principal export and import commerce of the Republic being with that Nation, and much of the foreign capital and enterprise in Honduras is American. During the past year the Government of Honduras has been invited to participate in a number of international American congresses, among which is the International Panama-Pacific Exposition, to be held in San Francisco in 1915. The President calls attention to the fact that at the recent election for vice president, judges of the supreme court, and deputies, out of a qualified electorate of 108,850 over 60 per cent voted. During the scholastic year 1910-11 there were 710 schools in the Republic, with a total matriculation of 29,525 and an average attendance of 20,664, as compared with 890 schools, having a registration of 35,703 pupils and an average attendance of 25,917 during the scholastic year 1911-12. According to the census of 1910 there were 118,052 pupils of school age in the Republic. In 1912 there were 371 pupils in attendance in Tegucigalpa and Comayagua.

There are two normal schools in operation in Tegucigalpa, and normal schools are maintained at Santa Barbara, Santa Rosa, and Juticalpa. Four high schools are maintained in the Federal capital, and one each in the cities of Juticalpa, Santa Rosa, and Santa Barbara. In 1912 the manufacture of straw hats was added as a branch to the School of Arts and Crafts in Tegucigalpa. The straw-hat industry is an important one in the Department of Santa Barbara, and hats of fine quality are manufactured there. Schools for the manufacture of straw hats have also been established at Catamarca and Juticalpa. The agricultural school at Danli and the school at Tegucigalpa for the manufacture of cigars and cigarettes are in a flourishing condition. In 1912 the exports of Honduras amounted to 7,700,446 pesos and the imports to 10,793,285 pesos. A contract was made during the past year by the Government of Honduras for the construction of a railway from the frontier of Salvador to the boundary of Nicaragua. The receipts of the National Railway during the last six months of 1912 were 277,572 pesos and the disbursements 191,851 pesos. Lands to the extent of 30,870 hectares

were granted in 1912 for agricultural use. The cultivation of tobacco at Danli during the year was highly satisfactory. The Government encouraged the development of this industry by distributing tobacco seeds to farmers in that part of the Republic suitable to the raising of this plant. — The ARMY of Honduras at the close of 1912 numbered 47,062 soldiers, 30,943 of whom were classified as of the first rank. The army is recruited from the militarily eligible male citizens between the ages of 21 and 40 years. Military and artillery schools are maintained by the Government. From April, 1911, to November, 1912, the expenses of the War Department aggregated 1,431,055 pesos. In 1912 the receipts of the Government of Honduras from all sources were 4,627,305 pesos, or \$6,160 pesos more than the amount of the receipts estimated in the budget. — Dr. Francisco Bertrand was installed as VICE PRESIDENT of the Republic of Honduras on January 11, 1913.



It is estimated that the tax levied on PULQUE by the State of Puebla will produce an annual revenue of about 180,000 pesos. Large quantities of pulque are made and consumed in the State of Puebla, and in all of the tableland country surrounding that State. — The COIN COLLECTION in the National Museum in the City of Mexico has been recently enriched by the purchase of Jorge Luciso's fine collection. The price paid was 9,000 pesos. — The department of forestry of the Government of Mexico has decided to plant on and around the grounds of the Mexico Country Club, in the Valley of Mexico, 15,000 trees. The planting of trees is being encouraged by the Government and private persons in many parts of Mexico, and arbor day celebration has become one of the principal feast days of the country. — Plans have been made by the National Chamber of Commerce of Torreon to hold an EXPOSITION of the products of the State of Coahuila. The organization referred to will also make experiments with cotton seed of the long-fiber variety, and a supply of this seed has been ordered abroad. Coahuila possesses some of the finest cotton-producing lands in the world, and an important branch of the manufacture of cotton goods has developed in and around the neighborhood of Torreon. Cotton is raised in this vicinity by irrigation, and is of a very fine quality. — The department of war of the Mexican Government has received an invitation from the NATIONAL RIFLE ASSOCIATION OF AMERICA to participate

in the association's contests which will be held at Camp Perry, Ohio, from August 18 to September 9 of the present year.—The Mexican Development Co. of Peoria, Illinois, is building a WAGON ROAD from its mines in the Purificacion district to the Pacific port of Chamela. The road will be about 30 miles long, and is planned to be one of the best constructed wagon roads in the country. Large copper properties are in the neighborhood through which the road will pass, and considerable mining development in the near future is looked for in the locality referred to.—The Geographical and Statistical Society of the City of Mexico has changed its name to the MEXICAN GEOGRAPHICAL, HISTORICAL, AND STATISTICAL SOCIETY.—The Lighthouse Minzio in the State of Oaxaca was inaugurated on February 5 last.—The EXPOSITION OF MEXICAN PRODUCTS at Colima, capital of the State of the same name, was inaugurated on March 1 of the present year. In addition to fine exhibits of the agricultural, mining, and forestal resources of the Republic, and especially of the Pacific coast region, there has been added an important section devoted to fine arts, and painters and sculptors from all parts of the Republic have sent exhibits of their works.—Arrangements have been made, according to the Mexican Herald, to construct two DRY DOCKS at Coatzacoalcas, and for dredging the harbor of Salina Cruz. Contracts for this work have been approved by the Chamber of Deputies, and it is expected that the actual work of construction will commence within a short time.—An electric plow is being used in the work of DRAINING LAKE TEXCOCO. The drained lands are in close proximity to the City of Mexico, and steps have been taken to wash out the excess of alkali contained in the soil so that crops can be raised thereon. Experiments on a small scale have been made in this direction with excellent results. The water bed underlying these lands is only a small distance from the surface, and even in the dry season a sufficient amount of moisture is easily obtained by capillarity, where the soil is in good physical condition, for the nourishment of crops.—The budget of Mexico contains an item of ₧50,000 for the purpose of getting rid of the water lilies in Lake Chapala, which are of such rank growth as to impede navigation.—The MUNSON STEAMSHIP lines have made a new contract with the Mexican Government effective for a period of three years.—The Santiago Ixcuintla MINES on the Pacific coast of Mexico is said to have recently employed 200 Japanese laborers to assist in the extraction of ores.—The Mexican Herald states that it is reported that Jose Victor Gaxiola, of Sinaloa, is negotiating in the United States for the sale of the ALTAMIRA ISLAND, which lies just off the port of Altata. The island contains about 1,000 hectares of land, and it is proposed to found a colony there.

NICARAGUA

An executive decree of January 14, 1913, declares free of duty the IMPORTS OF BUILDING MATERIAL, such as doors, windows, shutters, iron, nails, etc., when made by persons who suffered from the fire of December 20, 1912, at Cape Gracias, for the purpose of rebuilding their property. The exemption is for a period of six months, and is a personal one, and material imported under it can not be sold or used in any other way except to rebuild the destroyed property of the person importing the same. — A law which became operative on January 18 last, concerning the NATIONAL REVENUE BONDS of 1913, fixes the value of each liter of aguardiente sold by the Government at ₡12.50, national currency, or its equivalent in cordobas, except on the Atlantic coast, where it will be sold at ₡1.25 silver. The liter of pure alcohol will be sold throughout the Republic at ₡23.12 national currency, or its equivalent in cordobas, and denatured alcohol at ₡3.50 national currency, or its equivalent in cordobas. From the taxes on each liter of aguardiente, ₡2.50 national currency will be set aside as an amortization fund to be used as follows: The Government will issue bonds not exceeding ₡6,250,000 national currency, payable to bearer. These bonds, which bear 1 per cent interest per month, will be placed on sale at par under the following conditions: Fifty per cent in cash and 50 per cent in Government obligations. This issue of bonds will be known as the national revenue bonds of 1913, and consists of 25,000 bonds of 250 pesos each. The receipts and disbursements connected with these bonds will be made through the National Bank of Nicaragua, the proceeds of the sale to be used preferably in the payment of salaries due to October 31, 1913, and civil and military expenses. — The exports from San Francisco to the Republic of Nicaragua in 1912, according to the report of Sr. Adolfo Vivas, consul general of Nicaragua in that city, amounted to \$786,998. The principal items exported were: Flour, \$319,489; rice, \$181,733; groceries, \$140,654; petroleum, \$28,560; machinery, \$15,456; wines, \$5,694; and miscellaneous products, \$95,413. The packages shipped out during the year numbered 224,102 and weighed 13,082,554 kilos. The largest shipments of flour were made in July and August, the August shipments amounting to \$85,188 and the July shipments to \$63,566. — Through the courtesy of Sr. Dr. Salvador Castrillo, minister of Nicaragua at Washington, the MONTHLY BULLETIN is informed that the CABINET of President Adolfo Diaz, who was inaugurated at Managua on January 1 of the present year for the constitutional period of

1913 to 1917, is composed of the following members: Dr. Alfonso Ayon, secretary of interior, justice, police, and charities; Sr. Pedro Rafael Cuadra, secretary of finance and public credit; Engineer Jose Andres Urtecho, secretary of war and marine; Sr. Salvador Calderon Ramirez, secretary of fomento and public works; and Sr. Diego Manuel Chamorro, secretary of foreign relations and public instruction. The entire cabinet immediately entered upon the discharge of the duties of their respective offices, with the exception of Sr. Salvador Calderon Ramirez, who was at that time abroad, but who took possession of his office on his return to Nicaragua. Sr. Don Fernando Solórzano, vice president of the Republic, was inaugurated at the same time. —The National Assembly of Nicaragua has elected Dr. Daniel Gutierrez Navas, justice of the Republic of Nicaragua in the Central American Court of Justice. The term of office is five years. —A DAILY NEWSPAPER entitled "La Informacion" (The Information) has recently been founded in Managua under the direction of Francisco Vega. —A recent decree of the Congress of Nicaragua restores the TOWN OF TEUSTEPE to the Department of Chontales. —An AGRICULTURAL AGENCY has been established at Carazo in charge of Capitan Matias Bonilla. A similar agency has been opened at Santa Anita, Leon, in charge of an agent and 10 soldiers. —The following appointments have recently been made in the diplomatic and CONSULAR SERVICE of the Republic of Nicaragua: Gen. Evarista Henriquez, chargé d'affaires of Nicaragua in Honduras; Dr. Helsmartel, consul of Nicaragua at Antwerp, Belgium; Sr. Carlos Chamorro, consul general at Paris; Sr. Pierre Farre, consul at Rheims, France; Sr. Arturo Fletes Remon, consul of Nicaragua at Valencia, Spain; Sr. William H. Ellis, consul at Salina Cruz, Mexico; and Sr. Wilfredo Mazon, consul at Habana, Cuba.



PANAMA

The new NOTARY LAW of the Republic of Panama, which became effective on the first of the present year, provides that the term of office of notaries and registers of deeds shall be for a period of two years, and that these officials shall be appointed by the President of the Republic. Under this law notaries are permitted to charge the following fees: For the issuance and insertion in the protocol of any instrument acknowledged before the notary, 50 centesimos of a balboa for the first folio and 25 centesimos for each succeeding folio; for the protocolization of documents not acknowledged before the notary, 50 centesimos; for each copy of a document issued or proto-

colized, 50 centesimos for the first folio and 25 centesimos for succeeding folios; for the cancellation of any document, 50 centesimos; for each certification of the cancellation of a document, 50 centesimos of a balboa, and 1 balboa for issuing any document outside of the notary's office, which charge may be doubled if the document is issued at night. Notaries public and registers of deeds are required to note on the bottom of copies and certificates issued by them the amount of the fee charged. — A law has been promulgated prohibiting the organization or operation of CHINESE CLUBS in the Republic, except where they are authorized and regulated by the Panaman Government. Persons aiding Chinamen to form clubs by renting buildings or rendering assistance in any other manner are liable to punishment for the infringement of this law. — The Government of Panama has authorized Alceo Hazera Salinas to establish an AGRICULTURAL COLONY on 10,000 hectares of Government lands in the Province of Bocas del Toro in the region bordering on the Garumo River and the western boundary of Costa Rica, or such other part of the Province of Bocas del Toro as may be agreed upon by the parties in interest. This land is to be surveyed by the Government of Panama at the expense of the concessionaire. Within a period of five years the concessionaire agrees to establish an agricultural colony of not less than 50 families on one tract of 5,000 hectares. The colonists have the privilege of acquiring small tracts of this land in fee simple, and arrangements have been made for payments for same on the installment plan. The concessionaire agrees to build public roads and make other necessary improvements. — An import duty of 0.40 balboa has been placed on SOLE LEATHER brought into the Republic. Double this duty will be charged if imported cut to the sizes required for use on shoes or if in strips. Machinery for tanning factories is admitted free. — A law promulgated on December 28, 1912, provides for means tending to the civilization of certain tribes of Indians living within the Republic. The full text of the law is published in the Gaceta Oficial of January 24, 1913. — Investigations are being made by the Government of Panama looking to the use of the waters of the Santa Maria, La Villa, Rio Grande, and other rivers and streams for IRRIGATION purposes. Detailed studies will be made in the Provinces of Veraguas, Los Santos, and Coclé, and full reports are to be rendered to the President of the Republic, who has been empowered to take the necessary steps for making a practical test of irrigation in the Provinces mentioned. — The Federal Congress has passed a law establishing TUBERCULOSIS SANITARIUMS at Alto Boquete, in the Province of Chiriqui and in the highlands bordering on the Anton Valley, in the Province of Coclé. The sum of 50,000 balboas has been appropriated for this purpose. An additional appropriation of 6,272.83 balboas has been made by

the Federal Congress for defraying the expenses caused by the BOUNDARY controversy between Panama and Costa Rica.—The Gaceta Oficial of Panama of December 5, 1912, publishes THE HAGUE CONVENTIONS between the Republic of Panama and the following countries: Consular convention with Holland and arbitration and copyright conventions with Spain.—Angel Maria Aguilar has been given a three years' scholarship by the Government of Panama to study painting and sculpture in Italy.—The Panama Development & Manufacturing Co. has contracted with the Government of Panama to establish a SUGAR PLANTATION AND REFINERY in the Province of Colon, cultivating at least 1,000 hectares of land in sugar cane. The Government grants the company free entry of the necessary machinery and supplies for building and equipping the factory, and the chemicals needed in the operation of same are to be admitted free for a period of 10 years. The company is also exempted from the payment of State and municipal taxes for 10 years.



PARAGUAY

A law promulgated December 26, 1912, imposes an export tax of 1.30 gold pesos (\$1.25) per ton of tannin extract, and \$0.50 gold peso (\$0.48) per ton of red QUEBRACHIO LOGS shipped abroad. Both of these products are excepted from the payment of lighterage and wharfage charges in cases where the exporters do not make use of Government lighters and wharves. Sacks for use in the exports of tannin extract are, under this law, admitted free of duty.—Sr. Fulgencio R. Moreno, a distinguished Paraguayan writer and author, has been appointed MINISTER of the Republic of Paraguay near the Government of Chile.—A recent order of the treasury department of the Government of Paraguay provides that duties on exports of LIVE STOCK shall be collected exclusively by the customs authorities. Within the last few months large numbers of cattle have been shipped from Paraguay into the Argentine Chaco at various points along the frontier under permits granted by the Paraguayan Government. In future similar shipments can only take place after the payment of export duties to regular customs officials, or their agents, having jurisdiction over the territory in which the shipments are made.—Dr. Carlos Tobar Gorgoño has been appointed CONSUL of Paraguay in Quito, Ecuador.—Sr. Emilio Aceval has been appointed president of the BOARD OF AGRICULTURE AND INDUSTRIES of the Government of Paraguay.—A committee of Brazilian engineers, under the chairman-

ship of Dr. Praxedes, recently arrived in Asuncion for the purpose of presenting the survey and planimetric studies of the NORTH-EASTERN RAILWAY of Paraguay. This line is planned to run from Asuncion through the departments of Limpio, Altos, Tobati, Barrero Grande, San Jose, Ajos, Carayao, San Joaquin, and Curuguaty, up to the Guaira Falls, connecting at that point with a Brazilian railway which will be built to meet it from Rio de Janeiro. — The department of foreign relations of the Government of Paraguay has notified the department of the interior of that country that the INTERNATIONAL SANITARY CONVENTION signed at Rio de Janeiro on June 27, 1904, between Brazil, Paraguay, and Uruguay became inoperative on October 31, 1912. — Sr. Victoriano Martinez has been appointed SECRETARY OF THE INTERIOR to take the place of Sr. Liberato Morales, resigned. — A SCHOOL OF ARTS AND CRAFTS for girls has been opened at Asuncion under the patronage of the Society for the Protection of Children and under the immediate direction of the Carmelite Sisters of Charity. The orphan asylum at Asuncion, now operated by the Society for the Protection of Children, is also to be placed in charge of the Carmelite Sisters of Charity. — The department of finance of the Government of Paraguay has recommended that the national budget for 1913 include an item of 615,000 pesos fuertes for the botanical garden and AGRICULTURAL SCHOOL, both of which are located in the suburbs of the Federal capital. The operation of the agricultural college in Paraguay in the past has been very successful, and preparations are being made to extend the field of usefulness of this institution in the future. — The Diario of Asuncion publishes in its issue of January 2, 1913, the complete BY-LAWS of the Bank of Spain and America which has recently established a branch bank in Asuncion. — Argentine STOCKMEN have purchased large quantities of land near Santiago de las Misiones for the purpose of establishing stock ranches in that vicinity. The lands of Misiones are especially adapted to the cattle industry, on account of the good climate, the abundance of water, and the excellent pasturage of that section of the Republic. It is predicted that a large amount of Argentine capital will flow into Paraguay to be invested in cattle in the near future. — The President of Paraguay recently submitted a message to the Congress recommending the adoption of the proposed BUDGET for 1913. One of the new items in the budget recommends the founding of a school of arts and crafts and the contracting of foreign professors for certain branches of intermediate and higher education. — A semimonthly REVIEW entitled "El Campesino" has been established at Mbuyapey. — An energetic campaign is being waged in the city of Asuncion against the sale of ADULTERATED FOOD. The activities of the campaign have been directed principally against

dishonest grocers and liquor dealers, and much good has already been accomplished from the agitation of the matter.—At the commencement exercises of the **NORMAL SCHOOL** of Paraguay, held in Asuncion in November last, diplomas were conferred on 22 students, 19 of whom were young ladies. The President of the Republic was present at the graduating exercises. The normal school of Paraguay is one of the best educational institutions of its kind in South America and exerts a great influence for good in **EDUCATIONAL** circles in Paraguay.

PERU

Recent Peruvian papers and magazines have devoted much space to the **WONDERFUL FLIGHT** of the young Peruvian, Bielovucic, across the Alps, thus successfully accomplishing an air journey, the attempt at which cost the life of another Peruvian, George Chavez, in 1910. In commenting editorially on the remarkable feat the *West Coast Leader*, of Lima, January 30, says: "History records how the intrepid conquerors, Hannibal and Napoleon, led their armies up and across the rugged Alpine barrier, performing feats that have long amazed the ages. In the crossing of Chavez and Bielovucic there was only a man and a flimsy machine of canvas, bamboo and steel, and yet these crossings of a latter day have also taken their place without challenge among the epoch-making achievements of mankind." According to the *West Coast Leader*, the total production of **COPPER** in the Republic for 1912 amounted to 27,400 long tons, as against 26,000 tons for 1911, or an increase of 1,400 tons. — According to newspaper reports a new **PETROLEUM COMPANY** has been formed in Panama for the purpose of exploiting the Peruvian oil fields. The capital is given at \$400,000 gold and the incorporators, Lindon Bates, Enrique de la Guardia, and Ricardo Bermudez, will acquire lands in Talara region of Peru, from which place the crude oil will be shipped to Panama to be refined and sold in the most convenient market. — As the work progresses on the **UCAYALI RAILWAY**, which, when completed, will link this river with the Oroya Road, it is interesting to note that the Ucayali is navigable all the year for large steamers as far up as Masisca. The climate in this section is very good and living more healthful than elsewhere in the Department, except in the valleys of Huallaga and upper Marañon. Requena, the town of second importance, has a population of from 1,000 to 1,200 when the rubber gatherers are at home; when these workers go forth to the rubber fields the population dwindles to about 250 persons. — The United States deputy consul stationed at Callao

recently paid a visit to the mountain districts of Peru, and on his return made a very interesting report on the **COMMERCIAL AND INDUSTRIAL CONDITIONS** as he found them. He takes up railway construction, imported merchandise, wages, foreign population, agricultural and mineral activity, etc. Speaking of the town of Huancayo, which has an estimated population of 8,000, he says that there are 50 shops carrying general merchandise, and that Sunday is the busy day of the week, when many Indian hucksters come from the surrounding country bringing raw products of great commercial value. Huancayo is 130 miles east of Lima and 118 miles south of Cerro de Pasco, and is on the line of the Pan American Railway, the advent of which will make the place of much more importance as a distributing center. — The general manager of the National Tax Collection Co. has made a report of **INCOME TAXES**, which shows that in 1911 the amount collected was \$103,577, and for the first six months of 1912 the amount is given at \$58,240.

SALVADOR

Sixteen kilometers of grading on the line of the **ORIENTAL RAILWAY** from San Miguel to Usulután were completed in January last, and enough 60-pound rails have been received to finish laying the track over this distance. The Oriental Railway is receiving rails at the rate of about 10,000 a month, or enough to lay over 15 kilometers of track. Ties have been contracted for the Usulután to Lempa section, and masonry work has been commenced on said section. Considerable material has been received for the construction of the Cutuco Wharf. The station building at San Miguel has been completed and the necessary repair work has been made between La Unión and San Miguel. — The **CHIEF JUSTICE** of the Supreme Court of Salvador is Dr. Federico Penado, one of the ablest jurists and most cultured men of the Republic. The Supreme Court of Salvador occupies a high place in the opinion of the citizens of that country, and has a good reputation abroad for the wisdom, fairness, and learning shown in its decisions. — The Departmental Hydro-electric Co., of San Salvador, has taken over the concession of Emilio Segura for furnishing **ELECTRIC LIGHT** and power to the cities of Cojutepeque, San Vicente, and Zacatecoluca. The new company has a capital of 1,000,000 pesos, and proposes to use the waters of the Chorreron and Acahuapa Rivers in furnishing light and power to the cities referred to, to large plantations and many of the smaller neighboring towns at very moderate rates. — The board of the **NATIONAL EXPOSITION OF AGRICULTURE**, stock raising, and

industry, which will be held in the city of San Salvador in August next, has elected the following officers: Carlos Melendez, president; Henry Downie, vice president; Francisco Melendez, treasurer; Dr. Francisco J. Mena, secretary; and James Hill, Gabino Mata, jr., and Norberto Moran, directors.——The treasurer of the Republic of Salvador, in a recent statement published in the newspaper entitled "Diario del Salvador," says that on December 1, 1912, the entire debt of the nation, amounting in round numbers to 25,800,000 pesos, silver, could have been completely liquidated with \$8,000,000 American gold. —A report of the department of public instruction shows that at the close of 1912 the six SCHOOLS FOR BOYS in the city of San Salvador had 1,494 matriculates. Five of these schools are day schools and one of them a night school. The teaching staff of the six schools referred to numbers 33, of whom 30 are men and 3 women. The report recommends the establishment by the Government of a separate normal school to take the place of the normal school annex, which is considered to be of too primary a nature to meet the growing educational demands of the country. The plan outlined for the proposed new normal school includes the raising of the standard of instruction and an increase in the curriculum of studies along the most progressive lines of normal school education. One of the great needs of the public schools of the Federal capital is a larger number of modern buildings especially adapted to educational purposes. There are a few of these buildings now in San Salvador, such as the Goicoechea and the Padre Delgado school buildings. The names of the six schools referred to and the principals in charge of same are as follows: Jose Simon Cañas School, principal, Mr. Francisco Urias G.; Manuel José Arce School, principal, Mr. Lisandro V. Montiel; Padre Delgado School, principal, Mr. Leonardo Azcúnaga; Goicoechea School, principal, Mr. Juan J. Solórzano, and the Night School for Adults under the direction of Prof. David Cornejo. The PAROCHIAL CHURCH AT METAPAN in the Republic of Salvador is one of the oldest and most unique ecclesiastical edifices in the country. The construction of this church was commenced in 1736 and the work was completed in 1743. The structure is of masonry, the Doric and Tuscan style of architecture prevailing, and the building is specially noted for the richness of its interior finish and decorations. The church has a single nave 60 yards long by 14 yards wide. The baptismal font, the ciborium of the principal altar, the candelabra, and the supports of the baldachin are of pure silver extracted from the Metapan silver mines.—The NATIONAL UNIVERSITY of the Republic of Salvador opened its course for 1913 on January 15 of the present year, the President of the Republic presiding. The dean of the University is Dr. Victor Jerez and the institution has been exceedingly prosperous under his management.

URUGUAY

The press of Uruguay reports that the **PORT DREDGING BILL**, as finally sanctioned by the Federal Congress, provides for the deepening of the port of Montevideo to a depth of 5 meters in the zone destined to the traffic of coasting vessels, and to 10 meters in the entrance channel, the anteport and the inner harbor known as *dársenas* Nos. 1 and 2. The President of the Republic is authorized to have excavated 10,000,000 cubic meters, either administratively or by contract, as may be deemed most advisable to the interests of the Uruguayan Government. The material excavated by dredging may be employed in making artificial lands. The Executive is authorized to acquire the material necessary to effect the dredging, and to repair the existing dredging plant, using for this purpose a sum not exceeding \$500,000. The bill gives the President authority to expend up to \$3,200,000 in dredging the port of Montevideo. The "Día," of Montevideo, gives the estimated **FOREIGN COMMERCE** of the Republic for the year 1912 as \$97,835,000, of which \$49,380,000 were imports and \$48,455,000 exports. —The Government of Venezuela has decided to establish a **LEGATION** of the first class near the Government of Uruguay in Montevideo. The Uruguayan Government recently sent a minister to Caracas, Venezuela. The **CUSTOMS REVENUES** of the Republic of Uruguay in 1912 were \$18,423,861, as compared with \$16,034,088 in 1911, or an increase of \$2,389,773 in 1912 as compared with the previous year. —The President of the Republic has authorized the board of the Mortgage Bank to issue a new series of **MORTGAGE BONDS**, known as series X, of a nominal value of \$5,000,000. These bonds are guaranteed by the State, and will be sold on the market. Leopoldo Peluffo has been elected chairman of the municipal board of Montevideo for 1913. The new chairman is an experienced engineer and former vice chairman of the board. —The *Société Auxiliare des Banques Régionales*, of Paris, has offered to finance the Government of Uruguay to the extent of \$2,000,000 for the purpose of establishing a State **SUBTERRANEAN TELEPHONE** and for building a Post and Telegraph Office in the city of Montevideo. A **HUMANITARIAN BILL** recently presented to Congress by the President of Uruguay, prohibits throughout the Republic "box" parodies of bullfights, pigeon shooting, cockfights, rat pits, and any other game or diversion which may constitute a cause of mortification to men or animals. Ill treatment of animals is prohibited, and the local municipal boards are authorized to adopt such measures as may be necessary.

for the protection of animals by means of arrests and fines. — A decree has been issued by the department of industry of the Government of Uruguay, in conformity with the cattle marks act, calling for BIDS FOR A SYSTEM OF MARKS adapted to the needs of the entire Republic. Persons desiring to compete must present plans, accompanied by full descriptions, before June 18, 1913, together with a deposit of \$250. A jury of seven persons is to be appointed to award a prize of \$5,000 to the successful competitor, whose system of marks the Executive is authorized to acquire at an outlay of not more than \$50,000. — Dr. Juan Carlos Blanco has been appointed MINISTER OF PUBLIC WORKS and Sr. Solano A. Riestra has been made a member of the board of the Mortgage Bank. — The secretary of public works of the Government of Uruguay has ordered the removal of a number of wrecks along the Uruguayan coast which are considered dangerous to navigation. Steps have also been taken for the better LIGHTING OF THE ENTRANCE CHANNEL of the port of Montevideo. The export COMMERCE OF VALPARAISO with Uruguayan ports in 1912 amounted to \$211,406, and consisted largely of nuts, beans, peas, and peach and grape juice. — The President of the Republic has presented a message and bill to Congress relating to the establishment of SLAUGHTER YARDS. The bill authorizes the Executive to apply the revenue from the official cattle marks and brands, up to \$1,850,000, in a sale yard and a slaughter yard in Montevideo, and 18 slaughterhouses in the departments. The plan of the national inspector of animal sanitary police, who was sent to the United States and Europe to study the question, showed the distribution in detail of the \$1,850,000. The object of the bill is to cheapen the price of meat to the consuming public.



VENEZUELA

“El Universal,” an important daily newspaper of Caracas, mentions, in an interesting review of the PROGRESS OF VENEZUELA under the able administration of Gen. J. V. Gomez, the principal events which have occurred, among which are the following relating to the domestic affairs of the nation: The celebration of the centenary of independence, the founding of a national sanitary bureau, the repeal of laws placing burdensome taxes on legitimate industries, the reestablishment of trade relations with Colombia, the settlement of the boundary question with Ecuador, the holding of a municipal congress, the making of a map representing the physical configuration of the Republic, the compiling of laws and decrees and their revision and modification, the introduction and exclusive use of the

metric system, the establishment of shops in the penitentiaries, the purchase of the house in which the liberator, Simon Bolivar, was born, and the adoption of a standard official time in the Republic. The growth in commerce during the period referred to was most remarkable, foreign trade having increased from 173,000,000 bolivars during the fiscal year 1910-11 to 234,000,000 during the fiscal year 1911-12. The exports in 1910-11 were 94,000,000 bolivars, as compared with 129,000,000 bolivars in 1911-12. The imports in 1910-11 were 79,000,000 bolivars as compared with 105,000,000 bolivars in 1911-12. The Petaquire GOLD MINES are probably the oldest auriferous mining property in the Republic, having been discovered and worked in 1560 and 1561. From 1573 to 1580 these mines were profitably exploited, but after that time work was suspended and the mines remained untouched until 1839, when they were rediscovered by means of ancient charts and descriptions, but during the interval of 73 years thereafter were again left untouched. The property has recently been opened and work has again been commenced in the old shafts, galleries, and tunnels which have been found practically intact. Recent reports are very flattering as to the future of these mines. The surrounding district is a highly mineralized gold region, and it is predicted that considerable gold mining activity will be developed in that part of Venezuela in the near future. — The department of public works of the Government of Venezuela has contracted with Carlos Ponthier, representing the Grand Railway of Tachira, a joint stock company domiciled at Maracaibo, for the prolongation of its railway from Uraoa to Cara de Perro, with the object of establishing its terminal station on that tableland. — The department of foreign relations of Venezuela has appointed the envoy extraordinary and minister plenipotentiary, Dr. Santos A. Dominici, near the Governments of Germany, Great Britain and the Netherlands, a delegate to the INTERNATIONAL CONGRESS FOR THE PROTECTION OF INFANCY which will meet in Brussels in July next. — Dr. Melecio Figuredo Eyzaguirre has been appointed CONSUL OF VENEZUELA, at Grenada, Windward Islands. — Work has been commenced on the GUARICO AQUEDUCT. When this aqueduct is completed it will supply the Villa de Cura and other towns with an abundance of potable water. The aqueduct is planned to run through some fine valleys and a rich agricultural section in the neighborhood of the Guarico River, and surplus water will be available for irrigation purposes. — The governor of the State of Zamora has been authorized by the Federal Congress to build a TELEPHONE LINE between Altamira and La Bellaca.

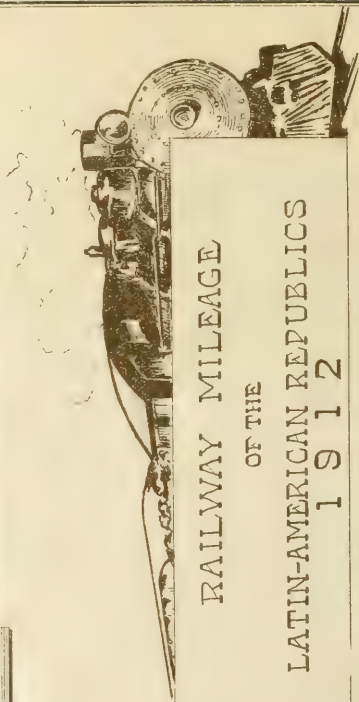


COUNTRIES MILES

ARGENTINA	20,314
MEXICO	16,104
BRAZIL	14,000
CHILE	5,091
CUBA	2,195
PERU	1,700
URUGUAY	1,560
BOLIVIA	750
COLOMBIA	645
VENEZUELA	545
GUATEMALA	450
COSTARICA	430
ECUADOR	365
PARAGUAY	235
DOMINICAN REP.	225
PANAMA	202
NICARAGUA	194
SALVADOR	122
HONDURAS	106
HAITI	94

PAN AMERICAN UNION - WASH. D.C.

RAILWAY MILEAGE OF THE LATIN-AMERICAN REPUBLICS 1912



J. H. Loomis

BULLETIN OF THE PAN AMERICAN UNION

JOHN BARRETT, DIRECTOR GENERAL.
FRANCISCO J. YÁNES, ASSISTANT DIRECTOR.



MAYAN ANTIQUITY AT QUIRIGUA, GUATEMALA.

GOVERNING BOARD OF THE PAN AMERICAN UNION

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Office of Embassy, 1013 Sixteenth Street, Washington, D. C.
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CHARGÉS D'AFFAIRES.

Ecuador Señor Dr. S. S. WITHER,
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Mexico Señor DON ARTURO DE LA CUEVA,
Office of Embassy, 1413 I Street, Washington, D. C.
Panama Señor DON J. E. LEFEVRE,
Office of Legation "The Portland," Washington, D. C.

¹ Absent.



THE LATE SEÑOR DON MANUEL BONILLA.

President of Honduras, who died on March 21, 1913.



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PROGRESSIVE GUATEMALA

IN the capital of Guatemala a beautiful and most unique monument was recently unveiled. Design and outline typify the country's progress and prosperity, but more particularly this beautiful shaft commemorates the union of the oceans of the east and of the west. Barrios, on the Caribbean, is now linked by rail with San Jose, on the Pacific, 270 miles, and this important step in the progress and welfare of the Guatemalan nation has prompted the erection of this monument.

The location, on the Plaza Reyna Barrios in the capital city having been selected, the execution of the work was placed in the hands of the well-known engineer, Sr. Don Luis A. Fontaine, who, after 14 months of constant study and labor, has produced a work which worthily commemorates the important epoch in Guatemalan history.

The design of the monument not only called forth the engineer's ability but also his artistic talent. He desired to represent natural beauty, the commercial products with which the country abounds, as well as to note the progress of civilization. Blocks of granite and natural boulders, which together with various metal figures, have been combined to form a pleasing whole, weighing more than 66 metric tons. Standing near the top of the monument is an angelic female figure in bronze with outstretched wings, and holding in the left hand a trumpet, while the calm and serene face overlooking the city, appears to be wrapped in meditation. Other bronze figures and symbols lower down the shaft beautifully portray commerce and labor, while the stream of clear water coursing from within adds still another aspect of beauty and purity.

The unveiling ceremonies which recently took place at the capital were participated in by the highest Government officials and other prominent men. The Minister of Fomento, Sr. Don Luis Mendizabal, took a leading part in the ceremonies, and the address of the occasion was delivered by Sr. Don Adrian Recinos.



MONUMENT RECENTLY UNVEILED IN GUATEMALA CITY, GUATEMALA, TO COMMEMORATE THE COMPLETION OF THE INTER-OCEANIC RAILWAY

The massive granite blocks and bowlders, the striding bronze figures, and the other significant emblems, symbolize the material beauty of the country, its common toil and industrial activities, and convey an idea of the spirit of progress and development.

THE U. S. DEPT. OF AGRICULTURE BUILDING, WASHINGTON, D. C.



Guatemalan newspapers laid much stress upon the ceremonies and their significance; "Guatemala moderno" (modern Guatemala) occupying large headlines in the newspapers and the addresses of the officials being reproduced verbatim.

The advent of the modern railway uniting the coasts of the Republic has been fittingly commemorated; the railroad building southward from Mexico to unite with the Guatemalan roads will soon be completed; other lines in course of construction are bringing the outlying sections of the country into closer touch with the capital, which with numerous new buildings and municipal improvements bespeaks abundant progress.

Much interest has been manifested recently in Guatemala and the opportunities the Republic offers; and since the interoceanic railway provides such excellent opportunities for seeing the country, numbers of tourists as well as business men have been attracted there. A pleasant sail from New Orleans across the Mexican Gulf lands one at Barrios, the eastern terminus of the railroad. From this port the daily trains to the capital city traverse a most interesting country, both from the standpoint of the student of history and archaeology or of the man of business who seeks new lands for the promotion of modern agriculture and allied industries. The course of the railway lies through the richest section of the Republic, many of the localities being noted for products, such as coffee, sugar, rice, fruit, fibers, and many other things indigenous to the soil. In the eastern lowlands for many miles along the railroad the land is very productive and adapted to fruit growing and the cultivation of sugar cane; estimates place 2,000 square leagues well suited to the latter product, but scarcely one-twentieth of this land is utilized. Each "cabilleria" (111 acres) produces about 1,000 quintals of sugar. In the lowlands the cane harvests occur about every 10 months, and in the lands of higher altitudes about every 12 to 20 months.

The rubber tree is found wild along the Gulf coast and when the trees are 7 years old they often give 2 pounds of rubber a season; another profitable crop of the same section is the cacao plant, which at about 7 years of age produces more than half a dozen pounds of cacao; the squirrel, however, proves an enemy of this tree, but it is hoped that soon some enterprising person will find a scientific remedy for preventing this waste.

For the tourist leaving Barrios by the morning train there is much to interest, especially if he be historically inclined. Soon he finds himself within a section of the world where ancient peoples built many wonderful structures, the ruins of which to-day bear mute testimony to their skill as architects and builders. About noon the train reaches the little station of Los Amates, where the inquiring traveler should stop over and make a journey to the famous ruins of Quirigua, only a mile from the station, and which distance may be comfortably



EXTERIOR OF OPERATING HALL IN THE GENERAL HOSPITAL, GUATEMALA CITY.

The medical school of Guatemala was organized over two centuries ago and has preserved an historical record from that time to the present. Medicine covers a six-year course, pharmacy four years, and dentistry three years.



HOSPITAL "COLEGIO DE MATEUNIDAD" AT GUATEMALA CITY.

Large, airy, and well equipped, the hospitals of Guatemala are models of up-to-date medical institutions containing the most modern scientific devices and apparatuses.



THE SPACIOUS AND ARTISTIC BUILDING OF THE POST OFFICE DEPARTMENT
AT GUATEMALA CITY.



LAW SCHOOL AT GUATEMALA CITY.

This school has the shortest course of law of five years, in most Spanish American countries it is six years, in some seven, and in one eight years. The required studies embrace not only civil, criminal, and commercial law, court procedure, and the philosophy of law, but also international law and an outline course on Spanish and Spanish American literature.



PRACTICAL SCHOOL FOR GIRLS AT GUATEMALA CITY

The present organization of education in Guatemala embraces, in addition to the regular primary and secondary schools, practically all departments of higher and special instruction. There are faculties of law and medicine, normal, commercial, and industrial schools, and military, artistic, and musical



A CLASS IN THE PRACTICAL SCHOOL FOR GIRLS AT GUATEMALA CITY

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NEW PRACTICAL SCHOOL FOR BOYS, NEARING COMPLETION, GUATEMALA CITY.

In recent years the Government has been particularly active in fostering industrial education. Night schools have been founded for artisans, and special institutions of manual training have been opened in the capital and in some provincial towns. The curriculum corresponds to the higher grades of the elementary school, but to these are added instruction and practice in the arts and crafts. There are six such schools for boys and three for girls, besides two distinct trade schools.



CAVALRY SQUAD OF THE PRACTICAL SCHOOL FOR BOYS, GUATEMALA CITY.

As a rule these schools are boarding institutions. Part of the pupils are appointed and maintained by the State, while the others are private-paying scholars. Carpentry, ironwork, tailoring, and shoemaking are some of the practical trades taught in addition to the regular academic work. Courses in bookkeeping and stenography are given in the last years of the secondary schools of both sexes.



MAIN FAÇADE OF THE MILITARY ACADEMY AT GUATEMALA CITY.

This massive structure with its pompous drawing room and military building was inaugurated on January, 1932, by the President of the Republic, to commemorate the triumph of the principle of liberty, democracy, and progress over the old imperial régime of the past 300 years. The entire structure is the finest Gothic in architecture and presents a unique and original appearance.



FRONT OF INTERIOR BUILDING OF THE MILITARY ACADEMY AT GUATEMALA CITY.

In the foreground is the first patio, large enough for the most extensive maneuvers of the cadets. In back of the building is another smaller patio. The upper story of the structure is reserved for dormitories of the faculty and the library; the lower story is used for dining hall and billiard rooms.

covered in a carriage or on horseback. The sight of these ancient works, some of which are well preserved, will repay one for the trouble and the slight expense of turning from one's course.

In Guatemala the "conquest of the Tropics" has taken material form of the most approved character, and this fact is exemplified more especially in the new general hospital in Guatemala City and its able staff, which form a nucleus from which many smaller cities will be aided in combating disease and in the cleaning up campaign which has already achieved important results in several sections of the Republic.

During last year learning in its various branches received valuable aid and encouragement. The new military academy at the capital was opened last summer, and the event was made important by the presence at the inaugural ceremonies of the Chief Executive and other high officials of the Government.

The main building of the institution is very imposing, its massive style of architecture is attractive and pleasing and the corps of instructors is composed of gentlemen of the highest attainments in their respective fields of learning.

Lic. Don Virgilio Rodriguez Beteta delivered an inspiring address, dwelling particularly on the good results that may come to a nation through its military schools, which in the truest sense is not the teaching of war for the sake of mortal combat, but for instilling in youth the elements of discipline and of respect for authority; for promoting honor and true citizenship, morally, physically, and mentally.

Following the establishment of the military academy was the annual "fiestas de Minerva," which were celebrated in the autumn. The various events connected with these observances are anticipated with much interest and attract large crowds to the capital city. The President of the Republic, Sr. Don Manuel Estrada Cabrera, is the originator of the Minerva festivities, and his interest in the various phases is sufficient to popularize the events, which have a bearing on schools and the development of learning. So important were the proceedings of last year that they have been chronicled and arranged in booklet form under the name of Fiestas de Minerva de 1912. These addresses and orations indicate the high ideals for which the country's leaders are striving, and the numerous illustrations portray the institutions of learning, which are largely attended and which are probably exerting a more powerful influence on the future of the Republic than any other factor.

THE BULLETIN is indebted to Dr. Luis Toledo Herrarte, Secretary of Foreign Relations of Guatemala, for many excellent pictures of that country, a number of which are here reproduced, and which will give the general reader a far better idea of the country's progressiveness than columns of text.

DINNER IN HONOR OF SECRETARY OF STATE BRYAN

ON Thursday evening, March 13, 1913, the Director General tendered a dinner in honor of the Secretary of State, Hon. William J. Bryan, who, by virtue of this position, is the Chairman of the Governing Board of the Pan American Union. The dinner was held in the handsome Hall of the Americas, which was artistically decorated with heavy banks of palms and ferns, gently relieved by a dash of color from the effectively arranged floral embellishments.

To meet the Secretary and his charming wife, there were invited the ambassadors and ministers of the Latin American Republics, their wives, and several other distinguished guests prominent in official life and interested in the promotion of closer friendship between the American Republics. At the conclusion of the dinner a general reception followed, at which about 100 other guests were present, including the secretaries and attachés and their wives of the Latin American embassies and legations, and others of social and official distinction in the nation's capital.

Near the close of the dinner the Director General requested Senhor Domicio da Gama, the Ambassador from Brazil, and the ranking diplomat present, to extend a welcome, in behalf of the members of the Governing Board, to the new chairman. This he did in his characteristic and usual brilliant manner, which elicited words of commendation from Secretary Bryan. In his happy address the Ambassador said:

I duly appreciate the honor that befalls me of presenting the greetings of the diplomatic representatives of the Latin American Republics to the new Secretary of State of the United States.

I appreciate the honor and find the task a very agreeable one. To look with a joyous heart toward the rising sun is certainly a symbolic attitude and as human and natural as hope itself. Still better than to praise a man for his deeds, it is gratifying to bid welcome to the promising new worker in this ungrateful field of diplomacy, where so often only thorns come when we expect flowers and fruits as a reward to our labor. We bid welcome to the man with a noble heart, who for so many years has been preaching the advent of social justice, of respect to the rights of the individuals, of reciprocity in good will among men. After having made himself sure about the national needs in his country, after having fought the good battle for his political ideals at home, he went abroad to inquire about other peoples' needs. He has traveled extensively through South America with his keen eyes wide open and has seen and heard and retained much to his profit, to our benefit. And now that the fortune of national politics has brought him to the direction of the international politics of his country, we take advantage

tag of his profitable wanderings along our southern lands to claim him as an old and sympathetic acquaintance, if not a close friend to all of us. Under such favorable auspices any man could easily be convinced that in diplomacy we always mean well, even when we appear to look for trouble, our differences in most of the cases being rather of expression than of essence. He could easily be convinced also that, under the law of the less effort, international politics, which in this continent deals principally with those niceties of national feelings so dear to the patriotic Latin, has a greater tendency toward agreement than any other business in the world, since to deal with permanent nationalities is not the same as to deal with passing individuals. But the present Secretary of State of the United States knew all this before entering this new field of politics, where, by the way, he already looks so comfortably settled and so thoroughly at home. He certainly knows that to the man with a clear head and a kind heart the difficulties of his task are reduced by half. And we promise to use the best of our industry to help him in solving the remaining half, when occasion arises. So that, between personal good will and diplomatic desire to agree, our relations with the Department of State and its new chief will be as cordially friendly as becomes partners in the great work of civilization in this our continent of America.

Secretary Bryan replied in part as follows:

Whatever lack of confidence I may have in regard to other duties that may fall to the occupant of the office with which His Excellency President Wilson has honored me, I feel sure that he could have found no one either in our party or in our country who could meet more cordially the representatives of Central and South America. When the office was tendered me, one of the reasons that I gave for being willing to accept it was that it would enable me to join with our President in cementing even more closely nations that live so near us and are so identical with ours in their purposes and aspirations.

The visit which my good wife and I paid to some, though not all, of these southern countries three years ago increased, if possible, the interest which we felt in them, and I am grateful to Director General Barrett for giving me, as my first opportunity of meeting diplomatic representatives around a banquet board, the privilege of meeting you who are so close to us and who share in the responsibilities of developing his Western Hemisphere dedicated to freedom. I am grateful, too, to the Director General for having selected as the spokesman of this gathering to-night one who not only by his position stands at the head of the Pan American diplomatic circle, but who so felicitously expresses your greetings and good will.

He need not tell me that he has a high opinion of our country. I have had occasion to become acquainted with that fact; I have been sitting beside the better half of his family. Possibly I ought not to say the better half lest my remarks might be given a patriotic interpretation rather than the interpretation that we give; in this country we are glad to admit that a man is doing all that he can hope to do if he can even be the lesser half.

The Secretary then dwelt upon his trip through some of the countries of South America, calling attention to the various points of interest which especially attracted him. He spoke of San Marcos University at Lima, the oldest in the Western Hemisphere, and expressed his satisfaction at the tendency toward freer and more general education throughout the world. He commented on the educational development in Bolivia, and in Uruguay where the school system is modeled after that of the United States, and finally he referred with particular pleasure to his visit to a school at São

Paulo, Brazil, where as part of the exercises the entire student body rose and sang "My country 'tis of thee, sweet land of liberty, of thee I sing." Mr. Bryan then continued:

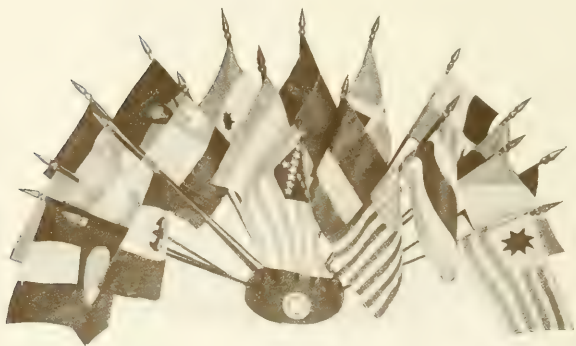
We returned from a delightful trip, after having received courtesies from all the nations visited, courtesies that I knew were not intended for us as individuals, but for us as citizens of a great country.

So, to-night, as a representative of our Government—as the one who by virtue of his office comes into closest contact with those who are here, the accredited representatives of other lands—as the occupant of this position, I say, I am grateful for this opportunity to meet you and to mingle with you. I am glad to assure you of the pacific purpose and the genuine friendship which the President of our great Nation entertains toward all the people and all the Governments of Central and South America, and to assure you that I am in complete sympathy with him in this friendship and interest. We desire that you shall know us and that our people should know you. We desire that our exports to your country shall increase and that our imports from your country shall increase, but I believe that the most valuable thing that can be sent across the border line of nations is an ideal. I am glad, therefore, that however we may feel about the tariff on other commodities there is free trade in ideals; we have gathered ideals from all the world; we are indebted to the world for ideals selected from every section. I have no doubt but that we shall be able to borrow from the experiences of our neighbors on the south, and we shall be glad to loan to them anything that has been developed and perfected here. We are not only glad to give you the advantage of our experience, not only glad to allow you to learn by our trials, our experiments, and our mistakes, but we are glad to have our people go among you, to assist you in developing the resources of the great countries that lie to the south of us. I am sure that I speak for His Excellency the President, as I speak for myself and for all associated with him in authority, when I say that we shall insist that the business men who go from our country to yours, to help to develop your resources, shall carry with them the same high standard of honor and integrity that we demand of business men in our country. We shall be even more exacting of them, for when people come among us, if they find a man who is bad, their opinion of our country may be made good by ascertaining that he is an exception; but when a man goes from us to a foreign country he must be even better in behavior, because there are not so many to help him represent our Nation. I am sure that this administration will be quick to admonish all who go among you that they go to represent the highest ideals of our country and that they must not fall below that standard.

But I am not here to make a speech; I am here to mingle with you about this board, to become better acquainted with you, and I have arisen simply to acknowledge, for the President of the United States as well as for the Department of State, your friendly greetings and to assure you that your good will is most heartily reciprocated.

The guests invited to the dinner included the Secretary of State and Mrs. Bryan; the Brazilian ambassador and Madame da Gama; the Assistant Secretary of State and Mrs. Huntington Wilson; the minister of Costa Rica, Madame Calvo, and Miss Marta Calvo; the minister of Bolivia, Madame Calderon, and Miss Calderon; the minister of Salvador; the minister of Venezuela; the minister of Nicaragua and Madame Castrillo; the minister of Cuba and Miss Martin-Rivero; the minister of Argentina; the minister of Uruguay and Madame de Pena; the minister of Chile and Madame Suarez, M.; the minister of Haiti; the minister of Guatemala and Madame Luz

Mendez; the minister of the Dominican Republic and Madame Peynado; the minister of Peru and Madame Pezet; the minister of Colombia; the minister of Honduras; the minister of Paraguay; the envoy of Salvador on special mission, Sr. Don Francisco Lima; the envoy of Guatemala on special mission, Sr. Don Antonio Batres Jauregui; Hon. Henry D. Flood, chairman of the House Committee on Foreign Affairs; the Second Assistant Secretary of State, Hon. A. A. Ades; the chargé d'affaires of Mexico; the chargé d'affaires of Panama and Miss Lefevre; the United States minister to the Dominican Republic and Mrs. Russell; Dr. James Brown Scott, director of the Carnegie Endowment for International Peace, and Mrs. Scott; Miss Margaret Wilson; Miss Isabella L. Hagner; Miss Helen Christian; the Assistant Director of the Pan American Union and Madame Yánes; and the chief clerk of the Pan American Union and Mrs. Adams.



GUAYAQUIL, ECUADOR'S GROWING PORT.

A DELIGHTFUL experience awaits the traveler who enters Ecuador's chief port from the sea. He passes from the ocean to the placid Bay of Guayaquil, and from that time until his arrival in the city, 40 miles up the Guayas River, he gazes upon nature's tropical handiwork spread before him on either side of the river. It is a bright and charming picture which, as the ship nears the city, grows more pleasing and causes the traveler to wonder why Guayaquil has not been more frequently visited by the average traveler.

The harbor is active, and as many curious balsas or native house-boats pass and repass the ship at anchor the traveler is forcibly reminded of the densely populated rivers of China. Some of these rafts have almost a community aboard, the writer having noted children, small animals, parrots, men and women, together with up-river products piled high around the living beings, the whole forming a most unusual sight for the visitor from the north.

These little balsas are single units which largely contribute to the commercial activity of the port, the larger coasting vessels, of course, transporting the bulk of commerce to the harbor whence the great ocean-going ships carry it to all parts of the world.

Guayaquil is to be modernized. A wonderfully progressive movement has been inaugurated to make it a cleaner and healthier city, and the outlay of enormous sums of money promise to completely change the business and commercial life of the place. The mischief-making mosquito is to be banished, and the many lessons learned at Habana, Panama, and in the Madeira-Mamore Railway country are to be applied to Guayaquil, and soon this attractive port will no longer be passed over by traveler or tourist, but on the contrary an era of commercial development is promised that will be notable, not only locally but throughout the Republic.

Ecuador has many products that the world needs, and the awakening of her chief port, coincident with the opening of the new trade route through Panama, are important factors in future development. In 1910 the country sent forth to the world \$13,638,308 worth of natural products, and during the last two years there has been a marked increase over these figures, cacao furnishing the bulk of this commerce, while "buttons"—that is, the ivory nut largely used for such purposes—contributes more than \$1,500,000 to this total, and the famous Panama hat brings the producers a like amount.



Courtesy of S. L. F. Carlini Guayaquil

SAN FRANCISCO PLAZA, GUAYAQUIL, ECUADOR.

Artistic little plazas at various points in the city add to its attraction and beauty. In the foreground is a statue of Don Vicente Rocaforte, the second President of the Republic of Ecuador, under whose administration the country enjoyed peace and prosperity.



Courtesy of S. L. F. Carlini Guayaquil

MILITARY HOSPITAL ON SANTA ANA HILL, GUAYAQUIL.

With \$10,000,000 now at the disposal of the Government by virtue of a recent loan, extensive improvements are being projected to thoroughly modernize and sanitize this growing Pacific port.



THE U.S. CAPITOL, WASHINGTON, D.C.

This is the building in which the U.S. Congress meets. It is one of the most beautiful and important buildings in the world.



THE LINCOLN MEMORIAL, WASHINGTON, D.C.

This is the memorial to Abraham Lincoln, one of the greatest presidents of the United States. It is a very beautiful and important building.

From New York around Cape Horn the distance is 11,470 miles, and the time of passage under ordinary conditions is more than two months; the route via Panama is 2,864 miles, and this distance can be covered probably in 8 or 10 days. Remembering that 90 per cent of the foreign commerce of the Republic passes through Guayaquil, it can easily be understood how important is the subject of health of the city, not alone for its 80,000 people but for foreign ports that trade with that country.

On October 5, 1911, the Ecuadorian Congress decreed that the President of the Republic should contract a loan of \$10,000,000 for the purpose of undertaking new and for completing the work already under way, relative to sanitation, water supply, and other improvements in Guayaquil. A certain scale of taxes was arranged as security for the payment of the bonds, which bear 6 per cent interest on their face value. Two and a half per cent additional were levied on imports



Courtesy of Sr. E. F. Carbo, Guayaquil.

HARBOR AND WATER FRONT AT GUAYAQUIL.

The general bustle and activity around the harbor front are unmistakable signs of steady progress and indicate in no uncertain terms the wonderful future in store for this port with the opening of the Panama Canal.

of the port; one-half per cent taxes was put upon urban property of the city; all of the gross receipts from the sale of potable water in Guayaquil; a portion of the municipal tax on cacao; wharfage tax; three sueres (about \$1.50) on each head of cattle imported; and various other sources of revenue combined to form the security for the loan.

Col. William C. Gorgas, of Panama Canal fame, with several assistants, at the request of the Government of Ecuador, visited the city as well as other sections of the country and was given every facility for preliminary investigations. His report on the amount of work and the probable cost has been submitted to the authorities and active work should soon follow.

Through the courtesy of Sr. Don E. F. Carbo, of Guayaquil, THE BULLETIN has the pleasure of presenting to its readers several pictures, which show how the cleaning-up campaign has already affected certain business sections of the city.

THE TIMBER LANDS OF PANAMA

At least 50 per cent of the area of the Isthmus of Panama is covered by virgin forest, and not less than 30 per cent by monte. The remainder is savannah, or grassland, adapted to grazing and tillage. The monte is comparatively light growth, which may be removed with the machete. In preparation for cultivation it is cut down and burned on the ground. All the woodland soils are especially fertile. The stretches of savannah and monte are found mainly in the provinces of Chiriqui, Cocolé, and the northern portion of Veraguas.

In a general way it may be said that the strip of territory lying to the north of the divide and extending from the Costa Rican border to the Canal Zone, as well as the entire area to the east of it, is one vast forest. Some portions of this territory are not adapted to profitable development owing to the heavy rainfall upon the Atlantic seaboard and the sparsely inhabited condition of the region. Without doubt this store of latent wealth will some day be made to yield enormously. At present, however, the investment of capital is confined to the sections in which timber is easily accessible, labor fairly plentiful, and transportation economically feasible. These conditions do not obtain, of course, in the superlatively rich forests of the central mountain range.

The practically accessible timber lands of Panama are situated upon the Pacific coast of Darien Province and in the peninsula formed by Veraguas and Los Santos. The former section contains half a score of large tracts owned by American, British, and German corporations. In a few instances, operations have already commenced, but the majority of these companies are timing activities to synchronize with the opening of the canal. The present disregard of the urgent demands of the local and South American markets, is probably due to the expectation of securing lower freight rates and higher prices when the all-water route to Europe is available.

During the past five or six years the average consumption of lumber in the city of Panama and the Canal Zone has been in excess of 50,000,000 feet annually. There is every prospect of the figures being maintained for two or three years to come. Extensive improvements in the capital are progressing or contemplated by the Government and citizens of Panama. A railroad from David, the



THE MAHOGANY TREE IN THE FORESTS OF PANAMA.

It is a giant among tropic growths. The usual tree of mature age is 4 to 5 feet in diameter, and stands a solid shaft for 50 feet before the first branches are given off. The bark resembles the black oak of the north, and the foliage is like that of the wild cherry. The most valuable wood of the trunk is found just below the first branching. As a rule, not more than two trees of marketable size are found to the acre. The tree grows best in low-lying, moist, rich, almost swampy land, along the coast or edges of rivers that have no great fall.

chief city of Chiriqui Province, to the city of Panama has been surveyed and authorized by the assembly. A number of buildings will be erected at Balboa, Ancon, Empire and Colon, for commercial purposes, as well as for the use of the future garrison and operatives of the canal.

Although the mountain of the eastern slope of the Andes contains a vast quantity of construction timber, it might as well stand in Central Africa, for all the use it is to the cities along the Atlantic littoral of South America. They have no immediate supply of lumber and are compelled to depend upon importations from the northern continent. The material received from this source is greatly inferior to the native hardwoods, for which much higher prices are willingly paid.

There has been little commercial lumbering on the Isthmus. At a few points in the interior natives are engaged in fulfilling the limited requirements of small centers of population. There are not as many as half a dozen sawmills operated within the boundaries of the Republic. Vessels are constantly delivering Oregon pine and California redwood at the docks of Panama. The railroad has been compelled to purchase guayacan ties from Haitian dealers, whilst the material for them abounds within 100 miles of the Canal Zone.

The forest regions of the south coast contain many districts extremely rich in hardwoods of various kinds, as well as other valuable products, such as rubber, cacao, sarsaparilla, and ivory nuts. It is hardly exaggeration to say that every stick of timber is marketable. The commercial trees range in size from the inch-thick guamero to the 10-foot bongo, and in value from the cheap but useful softwoods to burl and other varieties that sell by the pound. Caoba, or mahogany, is plentiful in many parts. Mature trees range from 3 to 6 feet in diameter. Espave, nispero, roble, several varieties of cedar, balsamo, and the amarillos are numerous in nearly every forest tract, together with a sprinkling of rarer and more highly prized trees. Here and there sections are especially well stocked with some particular species, such as mahogany, guayacan, or coratu.

The numerous streams afford facilities for logging, but the density of some of the woods precludes the employment of this means of getting them out, unless rafting, which is seldom economically feasible, is resorted to. The heaviness of the undergrowth in the localities containing the most valuable trees is an obstruction to lumbering. In my opinion an aerial cableway will prove the most satisfactory solution to this difficulty. Its operation would necessitate no clearing, except among the lower branches in its path. In view of the invariable short haul and down grade to the shore, I believe that this method of taking out the logs will be found to be the most



SAWING THE LOG INTO LUMBER.

If the local dealer in hardwoods thinks that the mahogany log is not fit for the foreign market, it is sawed by primitive methods (illustrated here) into boards as soon as it is brought out of the forest, and this lumber is used for the construction of houses on the spot, just as pine is used in the woods of Michigan or Canada.



SPANISH CEDAR ON THE BAYANO RIVER, PANAMA

The Spanish cedar is a tree of the temperate zone of the United States. It is a peculiarly tropical tree and flourishes in a temperature and climate in which the cedar is not found. It is found in the country contiguous to the Caribbean Sea and also in the Amazon Valley, in Brazil. It resembles and is closely allied to mahogany, and certain varieties can be distinguished therefrom only by experts. It is frequently cut down as mahogany, sold, shipped, and manufactured into furniture under that name. It is softer and as a rule is not so beautifully marked, but practically answers many purposes for which the rarer mahogany is used.



OLD WATER-POWER SAWMILL IN THE PROVINCE OF CHIRIQUI

Water-power has been used for centuries in the tropics for converting it into material for building purposes has served to make the erection of wooden houses

economical and convenient in most of the timberlands which I have described as "practically accessible."

In the sections referred to a fair supply of native labor is available. This will be shortly supplemented by two or three thousand seasoned Spaniards and Portuguese, whom the Canal Commission is gradually discharging. These are highly efficient workmen. At present the native workman usually receives 1 peso (\$0.50 U. S. currency) a day and a ration of jerked beef, fish, beans, rice, yams, and coffee.

Some of the islands belonging to the Republic are heavily timbered. On others, small but valuable stands of choice trees are found. Thus, a quantity of cocobolo exists in the Catalina Islands, near San Lorenzo Bay. Occasionally a native helps himself to a log, without leave or license, but there is no systematic lumbering in these tracts, nor has there ever been. The island of Coiba, 15 miles long by about 7 in width, presents a fine lumbering proposition, notwithstanding some extraordinary difficulties of operation. The chief of these arises from the density of the growth, which is impenetrable everywhere at a distance of half a kilometer from the shore, except for the aid of machete men. Brush, vines, seedlings, and an endless variety of low-growing plants fill the spaces between the trees. These include most, if not all, of the species common to the forests of the mainland. Natives of the island declare that caoba is plentiful on the south side.

There is in these forests a great deal of timber, possessing highly useful or ornamental qualities, which is not at present known to commerce, but only needs to be introduced to the trade and to consumers in order to come into wide demand. Brief descriptions of the most common of the varieties of Panama woods, such as are found in sufficient quantities to make the handling of them for export a profitable business, follows:

Espave.—This is a kind of bastard mahogany, with somewhat of a resemblance to cedar. It is found in two varieties, the darker bearing the greater likeness to caoba. Espave is easily worked, and is, in consequence, a favorite material with the natives for building construction and canoes. Dugouts of 40 feet length and 10 tons burden are commonly obtained from the trunks of this tree.

Coratu.—This is much like espave and is put to the same uses. It is also employed in the manufacture of furniture. It is a very hard wood with a beautiful dark grain, having the appearance of a fern leaf.

Capivo. This tree grows in the bottom lands near the streams and reaches a height of 100 feet to the lowest branch, with a thickness of 4 or more feet. It has a soft white wood, not unlike that of the sugar pine, which takes a high polish.

Cedra.—Of the cedrela family there are a number of varieties. The most frequent are the espinosa, papaya, amargo, grenadino, tangari, and ceballa.

Espinosa is the most useful of the cedars. It has a hard, close-grained wood, easily worked and polished.

Papaya.—This is a light wood, plentifully scattered through many districts, and much sought for purposes to which the finer cedars could only be wastefully put. The papaya has a strong resemblance to the white pine in grain and texture, but its color is darker. An average tree will measure from 5 to 6 feet in diameter.

Amargo wood has the bitter taste of quassia. It is exceedingly durable and, for that reason, is in demand for interior finishing. It is said that the sap of this tree never dries out and that it is found in the wood 100 years after it has been cut.

Ceballa owes its name to the fact that the grain of the wood has something of the appearance of a raw onion and the freshly cut log gives off an odor like that of the vegetable in question.

Grenadino so closely resembles mahogany in its color and veins as to deceive any but an expert. It is a lasting wood which may be put to most of the uses that are served by the latter.

Tangari deserves the same description as grenadino, from which it differs only in its closer resemblance, if possible, to mahogany. It may, without disadvantage, be substituted for mahogany in any of the purposes which that wood serves.

Mangrove, or mangle.—This tree grows upon the low shores of the ocean and on the banks of rivers that are washed by tidal waters. Its roots demand salt water and it thrives in salty marshes. It resembles blue gum in size and some of its qualities. It will burn green and is highly useful as fuel. There are three varieties of the mangrove—caballero, pinuelo, and maringolo.

Caballero is a hardwood, close grained, heavy, and durable. It has a light color and handsome markings. It is admirably adapted for frames.

Pinuelo is the least common of the varieties of mangle. It yields a white wood with a fine grain and is used as building material.

Maringolo is a close-grained, dark wood, susceptible of high polish. It is excellent material for posts and frames in the construction of dwellings. Timbers of mangrove resist climatic influences and the attacks of insects better than any other wood which may be obtained at the same price. There should be a market in the United States for mangle as a material for wagon spokes, ax handles, etc.

Alcornoco resembles the northern ash and may be put to any of the purposes served by the latter, than which it is much more durable. It has been used by the Canal Commission for railroad ties, but it is not so satisfactory in this capacity as guayacan, a more lasting



A MAHOGANY LOG, FELLED BY MEN FROM THE UNITED STATES

The mahogany log has hitherto been hewn into a square shape by native workmen in Panama, because it was thus more in demand by the foreign markets of London or Hamburg. Americans prefer to leave the log in its natural condition, as more wood is preserved thereby and the sawing can be better performed when it reaches the northern mill.



A MAHOGANY LOG LOADED IN THE FOREST UPON ITS CART.

After the log has been felled and sawed it is loaded upon a primitive but strong truck called *triniquial*. This is an evenly balanced two-wheeled cart, well adapted for its purpose.

wood, although also more difficult to work. The natives of Panama employ alcornoco extensively for the supporting timbers and frame-works of houses.

Moro, commonly known as fustic, is a valuable dyewood in extensive commercial demand. It enters into the manufacture of many articles of daily use among the peoples of Central and South America.

Soro is a handsome wood, having somewhat of the color and texture of mahogany. It is used in cabinetwork and in the manufacture of fine furniture.

Alcaroba is a hardwood of light color and dark vein, which takes a high polish. Alcaroba is suitable for show cases, desks, furniture, etc. In Mexico are several churches containing carvings in this wood which with age gains an improvement in appearance.

Roble. This is a true oak, closely resembling the American variety. There are three kinds of it in the forests of Panama, the white, the black, and the yellow. They are hardwoods, susceptible of a high polish and adapted to any of the uses to which the oak is put in American trades.

Cigua is much like camphor wood in appearance. It is excellent material for cabinetwork, interior finishings, etc.

Marin jinto is valuable wherever exceptionally heavy and durable wood is needed. It is used throughout the country districts of Panama for the rollers of the bullock-power sugar mills. It is a hardwood with a dense fiber.

Mascerno, although prized by European manufacturers of expensive furniture and piano cases, is not as widely known to commerce as it deserves to be. A demand for this beautiful wood might be created in the United States and Canada. Mascerno is found in most of the forested tracts of the isthmus. It has a secondary value as a dyewood.

The main saloon of one of the latest vessels of the Hamburg American Steamship Co. was finished in mascerno with very effective results.

Balsamo is a hardwood, nearly black in color, with a somewhat open grain. Under polish it has an attractive appearance. It is little known to commerce, but should enjoy a ready sale in Europe and North America. Balsamo is one of the widely distributed trees of Panama.

Amarillo. There are three varieties of this species. Their beautiful, coarse-grained, yellow wood may be worked up to a brilliant polish.

Bongo. This is one of the largest and one of the most common trees of the Panamanian forest, sometimes attaining a height of 160 feet, with a diameter of 10. It is a soft wood with a grain like that of cedar. The large canoes of the natives, called "bongos," are gener-



Courtesy of Wm. A. Coon.

RESCUING A LOG FROM THE SEA.

Logs which are being floated down the streams to the seashore for shipment frequently escape into the sea in the rushing torrent, and much valuable timber is lost every year.



Courtesy of Wm. A. Coon.

LOGGING SCENE IN PANAMA.

Although no harm results from the immersion of the logs in fresh water, care must be taken to remove them promptly from salt water because of the presence of the *teredo*, the boring animal, which is very destructive and infests wood of other vegetable matter in the tropical salt waters.



Courtesy of Wm. A. Coon.

LOGGING SCENE IN PANAMA.

The trees are usually cut just before the rainy season and the logs floated to the small rivers and creeks. When the streams are swollen and the water is high the logs are pinned together in rafts, which are then floated down the stream to the United States, and are floated down the stream to the coast towns, where they are sold to the timber dealers.



Courtesy of T. A. Barron.

BASE OF A GIANT CEIBA TREE

The little boy, standing on one of the wings of the buttressed trunk, gives some idea of the size attained by this great shade tree of the Tropics. The tree produces a large number of capsules from which an abundant supply of soft wool is obtained. This, when separated from the seeds, makes an excellent substitute for feathers in pillows, and is often used for this purpose. This crop is easily gathered, as the tree sheds the capsules in great bunches.



Courtesy of T. A. Barron.

A CEIBA TREE.

Among the many varieties of trees indigenous to the Tropics is the Ceiba, or silk cotton tree, specimens of which are found in Panama. This tree frequently grows to very large size, the top spreading out very much like an umbrella. The trunk is made up of curiously formed buttresses at the base, extending wing-like in all directions, as if to support and maintain the center of gravity of the enormous weight above.

erally obtained from this tree. The quipo differs very slightly from the bongo.

Nispero is one of the most valuable and numerous trees in the forest of Panama. It is very like rosewood, but harder and denser. There are few heavier woods. Its dark-red surface takes a high polish.

Nispero is quite as durable as Burmese teak. The ruins of a church, erected in Santiago de Veraguas more than 200 years ago, contain a reredos of this wood which is in perfect condition, despite the fact that it has been exposed to the elements during the past century. *Quira* is much like *nispero* in all respects.

Palo de Sangre is another rich, red wood, which polishes readily. It is suitable to the purposes served by *soro*, *cigua*, and other species of Isthmian trees.

Maria is a hardwood, with an irregular grain, which adds to its beauty but makes it somewhat difficult to work by hand. A notable quality of the wood is its elasticity, in which it resembles *alcornoco*. This gives it a demand for masts and telegraph poles. It is also useful as construction timber and for cabinetwork. *Maria* is one of the giants of the forest, attaining dimensions equal to those of the bongo.

Balsam copaiba is a very durable wood, valued in shipbuilding and construction. In certain sections of the Darien country it is extremely numerous. The tree has also a value for its medicinal product.

Lignum vite. This well-known tropical tree is frequently found in the timber regions of the isthmus. It is one of the most salable woods by the pound weight, which nets about \$250 a log.

Cocobolo is well known to commerce as a dyewood. There is a stable demand for the wood and an average tree fetches about \$200 in the log at Panama. In certain sections of Darien and Veraguas, *cocobolo* is to be found in great numbers.

Caoba, or *mahogany*.—The black and red varieties, of fine quality, are found in several parts of the Province of Darien and the peninsula of Veraguas. An average tree will cut 10,000 feet board measure.

Other trees of commercial value which are sufficiently numerous in the Panaman forest to admit of their exportation with profit are the *laurall*, akin to the laurel of southern California; the *guayacan*, an extremely hard and durable wood, the *aquado*, a very effective cabinet wood; the *aqua*, a beautiful white wood which under polish resembles ivory; the *caimito*, a dark-red, smooth-grained wood; *madrono*, *alfajia*, *yaya*, *coco*, orange, rosewood, ebony, and *frijolillo*.



NATIONAL UNIVERSITY OF CUBA

THE University of Habana counts three memorable dates in its history. Its foundation in 1728 as a pontifical and royal university; its secularization in 1842, when it became an autonomous institution under the patronage of the colonial government; and lastly its reformation and elevation to the rank of national university in 1899 when Cuba became an independent Republic. Notwithstanding these changing phases, the university has retained much of the olden type of organization, and in this respect holds a rather distinctive place among Spanish-American universities. This conservatism is marked in the retention of the colleges of letters and sciences, which in many sister institutions has disintegrated into the strictly professional schools of law and engineering. The University of Habana is not without its professional colleges, but the central feature of the university remains the college of letters and sciences, in which have given general courses in philosophy, history, literature, and science. These courses are attended not only by the students of this department, but students in the professional schools also must elect a certain number. This gives to the university a unity of organization and interest not enjoyed by most Spanish-American universities which are usually but a group of professional colleges bound together simply by name. At Habana the rector is an administrative officer only. He is not a professor in any department, and for this reason has a wider vision and a more universal interest in the institution as a whole.

Another distinguishing feature of the University of Habana is its concentration. It is the only university of Spanish America, with the exception of La Plata in Argentina, that has a campus. This is due in large measure to Gen. Wood who, when Governor of Cuba, took a lively interest in the educational affairs of the nascent Republic. Under the Spanish dominion the university had been housed in the center of old Habana, in gloomy, unattractive buildings. On the outskirts of the city on a commanding eminence stood the Proterea, the arsenal and ammunition factory of the Spanish colonial government. These grounds and buildings were no longer needed for the purpose for which they were designed, and Gov. Wood conceived the idea of removing the university to this position. At present all departments, except the college of medicine, are located on the campus. The grounds comprise several acres and are inclosed by a wall pierced by two gates. The main entrance at the north-western corner leads through iron gates and up an imposing flight



ENTRANCE TO MAIN BUILDING, UNIVERSITY OF HABANA, HABANA, CUBA

From its cramped and unattractive quarters in the center of old Habana the university has been moved to the outskirts of the city on a commanding eminence where formerly stood the arsenal and ammunition factory of the Spanish colonial government. Unlike most of the universities of Latin America, which are but a group of professional colleges bound together simply by name, this institution boasts of the college of letters and sciences as its central feature. The main building contains the administrative offices, the law college, and the important ethnological, archaeological, and natural history museums.



SIDE VIEW OF MAIN BUILDING, UNIVERSITY OF HABANA.

Another distinctive feature of this institution is its concentration. It is the only university of Spanish America, with the exception of La Plata in Argentina, that has a campus, and around which all the departments, except the College of Medicine, are located.

of stone steps, thence across a broad terrace by a diagonal walk, and then up another flight of steps to the main level. From this height one has but to turn around to see one of the most beautiful panoramas in America. Below lies the city, stretching away from the base of the hill to the harbor. To the right are the botanical gardens, a spot of tropical green, and beyond the landward suburbs of Habana following the roads that lead to the Provinces and climbing up the hillsides behind the city. To the left the open sea, and on a point jutting out into the blue water the picturesque features of Moro Castle surmounted by towers and battlements and flanked by the heavy dominating walls of Cabañas. Behind the university rises the still higher Principe Hill, and from this side is the carriage road that enters the campus.

Before the university was removed to this site the buildings of the *Pirotecnica* were renovated, remodeled, and adapted to scholastic purposes. Some were easily made available for their new uses.

The principal structure, employed in former times as residences for the officers in charge of the arsenal, is a noble building and worthy of being a university home. New buildings have been constructed from time to time—an engineering school, a chemical laboratory, and an agricultural building. The latest material improvement is the auditorium, a hall capable of seating 800, and artistically finished both within and without.

This policy of detached but adjacent buildings is unusual in Latin-American universities and is the consequence of the location on a campus. The main building consists of a central part, with two lateral wings. It contains the administrative offices, the law college, and the important ethnological, archaeological, and natural-history museums; back of it stands another building, having much the same floor plan, but of one story only. This is occupied by the school of engineering, agriculture, and architecture. Between these buildings is the court of honor, filled with tropical plants and flowers, while in the center stand two of the most magnificent laurel trees known in Cuba. The other buildings are located to the north and south of this central group. To the west, skirting the wall of the campus, there stood formerly a row of low, rectangular buildings used for the manufacture and storing of ammunition. Several of these structures were demolished two years ago by a violent hurricane. On this site it is proposed to erect the new school of medicine and pharmacy. At present the medical school is located in the center of the city in a building formerly used as barracks, while the laboratories of chemistry, histology, and bacteriology are housed in a different quarter of the town in another building, also used formerly as barracks. It is highly suggestive of the changed order of things in Cuba that the landmarks of a military despotism should be turned into agencies for the development of science. If all swords have not yet been beaten into plow-

shares, it at least gladdens the heart to see barracks formed into school-houses and arsenals into laboratories of the peaceful arts.

While the location of the medical college on the campus would be advantageous to the university in many ways, it must not be imagined that its present situation is inimical to its usefulness. True, the building is unattractive in outward appearance, but within it is reasonably spacious, with good lecture halls and laboratories of anatomy, hygiene, and physiology. The equipment is sufficient. The medical department is subdivided into the colleges of medicine, pharmacy, dentistry, and veterinary surgery. Of these the college of pharmacy only is located on the university campus, the others are conducted at the medical building in the city, in the university hospital, and in the laboratories referred to above, which are named in honor of Gen. Wood. The department of medical sciences is by far the largest of the three university faculties, enrolling during the year 1912-13, 631 students out of a total of 1,114. The matriculation in the different sections is approximately as follows: Medicine, 400; pharmacy, 110; dentistry, 70; veterinary surgery, 50. The enrollment in the faculty of medical sciences is increasing year by year. In 1910-11 it was but 500. The greatest growth is in the section of medicine, but in dentistry the increase is also very marked.

The enrollment in the other faculties of the university is not growing in the same proportion. In the college of law there are 219 students, and in the college of letters and sciences 264. The latter faculty is divided into five sections as follows: Letters and philosophy, engineering and architecture, pedagogy, sciences, and agriculture. The registration in these different sections is very unequal. In letters and philosophy and in science it is very small. But this does not imply that these departments are of little import in the university. As stated above, students in the vocational schools do a considerable part of their work here, although formally enrolled in their respective sections or in the faculties of law or medicine. The range of studies is much the same as in a college of arts and sciences in the United States, but the courses offered in any one department are not as varied. For example, in Latin there are but three courses, in philosophy but three, and in history but five.

The faculty of letters and philosophy is composed of six regular professors and three assistant professors, the faculty of pure sciences of nine regular professors, five assistant professors, and nine assistants. In filling a vacant chair the University of Habana retains almost every feature of the *oposición* procedure which the Spanish American universities inherited from old Spain, but has been very generally discarded in the last decades. This is another indication of the conservative spirit that is noticeable in the organization of Habana. The method as now pursued is as follows: A hundred questions relating to the branch of learning for which a professor is sought



THE NEW AUDITORIUM AT THE UNIVERSITY OF HABANA.

Among the new buildings constructed for the University are a medical laboratory, an agricultural building, and the laboratory of statistics and botany, with a seating capacity of 800.



PARTIAL VIEW OF THE GENERAL WOOD LABORATORIES OF HABANA.

Research is conducted at the medical building in the city, in the university hospital, and in the laboratories, which

are prepared by a committee of the faculty. Each candidate draws 10 questions, which he is expected to resolve at sight. After this test he draws three from another set of 10. These latter are more comprehensive than the first. They are virtually subjects for a lecture or a short thesis. The candidate chooses one of these three and in a period of 24 hours prepares his thesis. In the preparation he may have access to books, but receives no personal aid. Last of all he submits a program of topics for the subject he proposes to teach and defends such program from criticism that may be offered by the examining committee. In the olden time the candidates were confronted, each had the privilege of criticizing the answers, thesis, and program of his rivals. This part of the system, which gave it the name of *oposición*, has now been abandoned, but it still has defenders in the Habana faculty.

The teaching staff is divided into three classes: Full (titular) professors, assistant (*auxiliares*) professors, and assistants. The regular salary of a full professor who gives only one course is \$2,400 per annum. Usually in Latin America a professor gives but one course, ranging from three to six hours per week, and this constitutes a chair (*catedra*) in the university. In Habana, however, a plurality of courses is permitted, and except in the more technical subjects it is the rule. The chair of Greek, for example, comprises three courses, Latin three, etc. Of the 60 full professors, 25 teach two courses and an equal number three. As remuneration for the second course a professor is granted an additional 40 per cent of the regular salary, and for the third chair 20 per cent. The stipend of the assistant professors varies from \$1,200 to \$1,800, while for assistants (*ayudantes*) it is \$1,000. Notwithstanding the custom of plurality of courses and the relatively good salary that may be earned in this way (\$3,360 for two chairs and \$3,840 for three) very few professors devote their entire time to academic pursuits. Practically all follow some other profession or hold some governmental administrative position. In this respect conditions are the same in Habana as in other Latin American institutions. The university chairs are not filled by mere teachers, but by men eminent in their professions or in politics. The custom has its advantages and its disadvantages.

The annual budget of the university is approximately \$400,000. Of this sum about \$320,000 is expended in professors' salaries, and about \$50,000 in administration and service. The expenditure for the upkeep of the library, laboratories, and buildings is small. A relatively large amount is expended for prizes and traveling fellowships. Of the latter there are four worth \$1,200 each. They are awarded by vote of the faculty (two-thirds being required) to *alumnos eminentes de la Universidad*. The recipients are expected to reside abroad and study at some foreign institution. A prize is offered in each class to the best student. This is not decided by the regular

examination, but by means of a subsequent special test open only to those students who received the grade of "excellent" in the regular year-end examinations. If the class exceeds 25, two or more prizes are given, one for each 25 students or fraction thereof. These prizes consist in exemption from payment of the fee for the following course. If there is no higher course in the subject the prize winner may demand the equivalent in book- or scientific apparatus.

Another feature in which the university differs from most Spanish American institutions is the length of the course in the professional schools. The usual time is six years in medicine (in not a few it is seven); five years in law (in Buenos Aires and some others, six); and five years in engineering. When Gen. Wood reorganized the institution in 1899 and created the present National University, he



VIEW IN THE FACADE OF THE MEDICAL DEPARTMENT, UNIVERSITY OF HAVANA.

MADEIRA, J. A. (1900). *Universidade Nacional de Cuba*. Rio de Janeiro: Typ. da Off. Imp. do Estado.

reduced the traditional periods with the intention of intensifying the work. For medicine the allotted time is five years; for civil and architectural engineering, five; for electrical engineering, four; for agriculture, three; for law, five; for notariado, four; for political science, four; for pharmacy, four; for dentistry, three; and for veterinary science, three. In engineering the student has from 20 to 24 hours of exercises per week; in medicine from 24 to 30; in law about 15, of which one-third are taken in the college of letters. The scholastic year begins October 1, and with an intermission of two weeks at Christmas and one week at Easter classes continue until May 31. After this time come the year-end examinations, which continue throughout the month of June. Students who fail in the June examination have the privilege of trying another examination

in September before the reopening of the university. A student who, through slack attendance, or who, for other reasons, is thought not to have profited sufficiently in a course, may be required to postpone his year-end examination until September. Examinations are always public, oral, and given by commission of at least three professors, one of whom is the professor of the course in which the examination is given. A student who fails in the September trial must repeat the course. There are three passing grades. Even if a student pass and yet is not satisfied with the grade received in the June examination he may appeal to the dean and secure the privilege of repeating the examination in September.

The university is open to both sexes. Women matriculate in almost every department. The number is relatively small, but varies considerably as between different schools. Only one woman has graduated in law and but five in dentistry. In medicine there are always some women students. In pharmacy the number is greater in proportion to the total, ranging from one-fourth to one-third. The school of pedagogy, which is one section of the college of letters and sciences, naturally enrolls a comparatively large group of women.

The least in point of numbers of all the professional departments of the university is the college of agriculture. This department labors under several handicaps, of which one is the lack of suitable facilities for practical field study. The botanical gardens, which lie at the base of the hill on which the university is situated, have been assigned to the school as an experimental field. The gardens are more of a park than a farm, and the soil is not adapted to the culture of Cuba's two staples, sugar and tobacco. The school of agriculture should become one of the most important departments of the university. At present it offers two courses, one of three years, the other of four. The latter leads to the degree of agricultural engineer, and the curriculum is very comprehensive. It would perhaps be advisable to restrict the scope and encourage specialization in the last years. The three-year course is more practical. Agricultural education in Cuba is of recent introduction. This section of the university was created in 1900. It was not until some years later that it was properly equipped, and even yet it lacks a real farm for practical field work. In 1909 Congress voted to establish an elementary practical school of agriculture (*escuela granja*) in each of the six Provinces. At the formal opening of the university in October, 1912, the orator of the day was one of the professors of agriculture. He took advantage of the occasion to review what little had been done in this branch of education in Cuba, and to plead for an awakened interest on the part of his fellow countrymen in a subject so vital to the economic development of the island. Instead of being the least frequented, the college of agriculture should become the largest vocational department of the university.

ANTIQUITIES OF THE NEW WORLD AT THE TROCA- DÉRO IN PARIS¹

COMPARATIVELY few of the tourists who throng Paris each year know more about the Palais du Trocadéro than that it is an attractive architectural adornment of the metropolis.

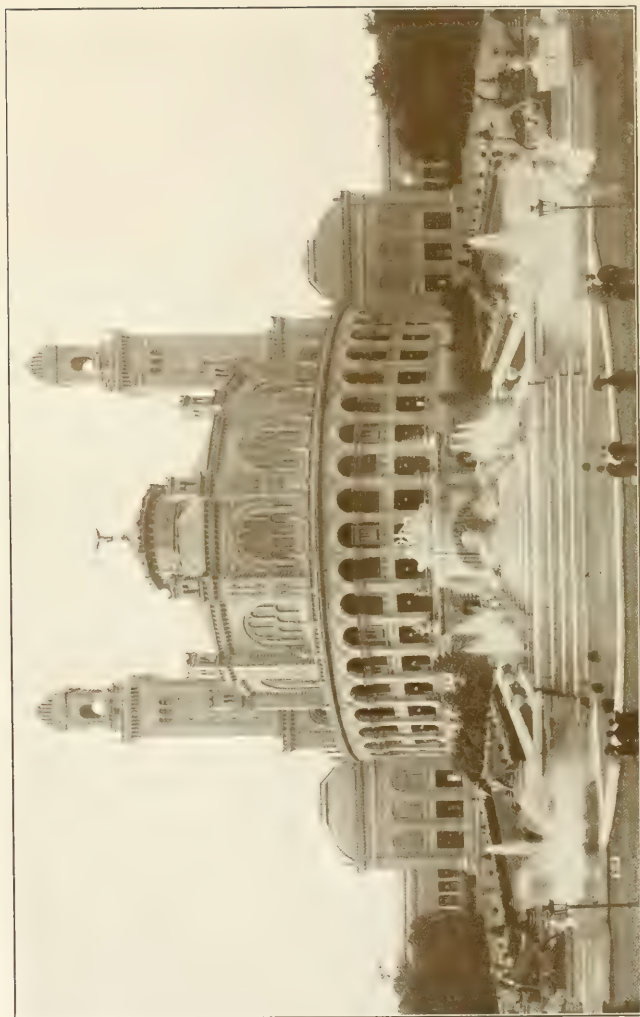
The fact that it contains two extremely interesting museums, well worth a visit, is usually overlooked in the search after the more widely known and historic gems which abound in this great city.

It is impossible, however, to overlook the building itself, which occupies a prominent position on a height above the River Seine, directly opposite the Eiffel Tower. Nearly everyone is familiar with the huge edifice built in oriental style, which was designed by Davioud and Bournais for the exposition of 1878. It consists of a circular building nearly 200 feet in diameter and 180 feet in height, surmounted by a dome and flanked by two minarets 270 feet high. Each side has a curved wing 660 feet in length, the whole presenting the appearance of an immense crescent. On the outer side is the handsome Palais du Trocadéro, on the inner side tastefully laid out gardens slope gently down to the edge of the River Seine. In the center of these, below the terrace in front of the central building, a beautiful cascade gushes forth and descends by gradual falls into a huge basin 196 feet in diameter.

The main building contains an elaborately decorated Salle de Fêtes, which seats 6,000 persons. The Museum of Comparative Sculpture occupies the left and part of the right wing, while the first floor is given over to the Ethnographical Museum, a greater part of which consists of exhibits from the South and Central American Republics.

A short time spent here is scarcely sufficient to grasp the extent and value of the large and interesting collections from the various countries, and many hours may be pleasantly and profitably passed among them, especially by the student interested in the history of the early civilization of the American continents. By the kind permission of the curator of the museum, Dr. Verneau, I was at liberty to wander at will among the treasures gathered here and which are only open to the public on certain days of the week.

A handsome stone stairway, embellished with fine stained-glass windows, leads up to the first floor. In the lower hall stands a repro-



THE TROCADÉRO MUSEUM AT PARIS, FRANCE.

The first floor of the center of the building is given over to the Ethnographical Museum, a greater part of which consists of exhibits from the South and Central American Republics.

duction of the Great Turtle of Quirigua, a gift to the museum of the Duc de Loubat. The walls are covered with copies of bas-reliefs from Chichen-Itza and Palenque, and at the head of the stairs stands a fine cast of the great Stela of Quirigua, and a round altar from Copan. This latter is a copy of the one in the Peabody collection at Cambridge. By means of these casts, and others in an adjoining hall, we are given the opportunity of examining and studying some of the wonders of the prehistoric cities which have been discovered in Yucatan, Guatemala, and Honduras. The curious carvings on the walls and stairways of temples and palaces, the hieroglyphics and peculiar picture writing covering the great monoliths, the meaning of which still baffles the archaeologists and scientists who have been endeavoring to lift the veil from the long-hidden secrets of the earliest civilization of the American continent—to these first inhabitants, whose origin we do not know, we owe the wonderful ruins which have for centuries stood undisturbed in the heart of primeval forests, shrouded in the mystery of ages.

Halfway up the stairway stand large show cases containing beautiful specimens of tattooed skins from Patagonia, war implements, headwork, and skins from the Strait of Magellan. In the upper hall Brazil shows a fine collection of the war costumes and war implements of the various tribes of the country. Here we see also a very curious circular hut, built of logs, from the Tierra del Fuego.

To the left we enter a handsome lofty hall, some 150 feet in length and lighted by eight stained-glass windows. Here the collections of smaller articles, handiwork of the past, are admirably arranged and displayed to the greatest advantage in large show cases.

Mexico has by far the largest and most complete exhibit—rare and valuable curios representing the ancient arts and industries of that wonderfully interesting country, being set forth in 25 or more handsome cabinets. We see first the beautiful and artistic pottery of every shape and kind; hundreds of clay figures of various sizes, from the ancient Kingdom of Tonala, in the State of Guadalajara; some 30 or more small figures in clay and wax, representing with wonderful perfection of detail, the various street types; a large collection of grotesquely sculptured pieces of stone found at Copatepec; curious glazed pottery from Cholula, and rich embroideries and cloths of ancient weave.

Two cases contain facsimiles of ancient Mexican manuscripts, the originals of which are in various European museums. The most interesting work here is a copy of the Codex Borgia, with its curious picture writing in brilliant colors. The Mexican text looks like a collection of pictures, with grotesque caricatures in gaudy colors, and we have here an excellent opportunity of studying these ancient pages, which when folded form volumes of moderate size. Several



GENERAL VIEWS OF THE MAIN HALL IN THE TROCADÉRO MUSEUM AT PARIS.

On the left is a stone idol, grotesquely representing a Toltec chief. The large vase in the center picture is curiously decorated in relief and was found at Umariu, Lake Titicaca, not far from the ruins of Tiahuanaco in Bolivia. The right picture is a porphyry statue of Quetzalcoatl, a gift to the Museum by a wealthy American.



CAST OF TEALOC, THE GOD OF RAIN, AT THE TROCADERO IN PARIS

The original was discovered in the temple of Chicomilco, Yucatan. Replicas of this sculpture may also be seen at the Smithsonian Institution in America.



SCULPTURED GRANITE SEAT FROM ECUADOR, AT THE TROCADERO IN PARIS

It is interesting to note that the art of the South American Indians seemed to develop along lines peculiarly its own, and the famous "seats" sculptured from solid pieces of granite found in the Province of Manabi are unlike relics discovered elsewhere in South America.

of these are the work of Mrs. Zelia Nuttall, who has copied the rare and ancient manuscripts with such wonderful accuracy.

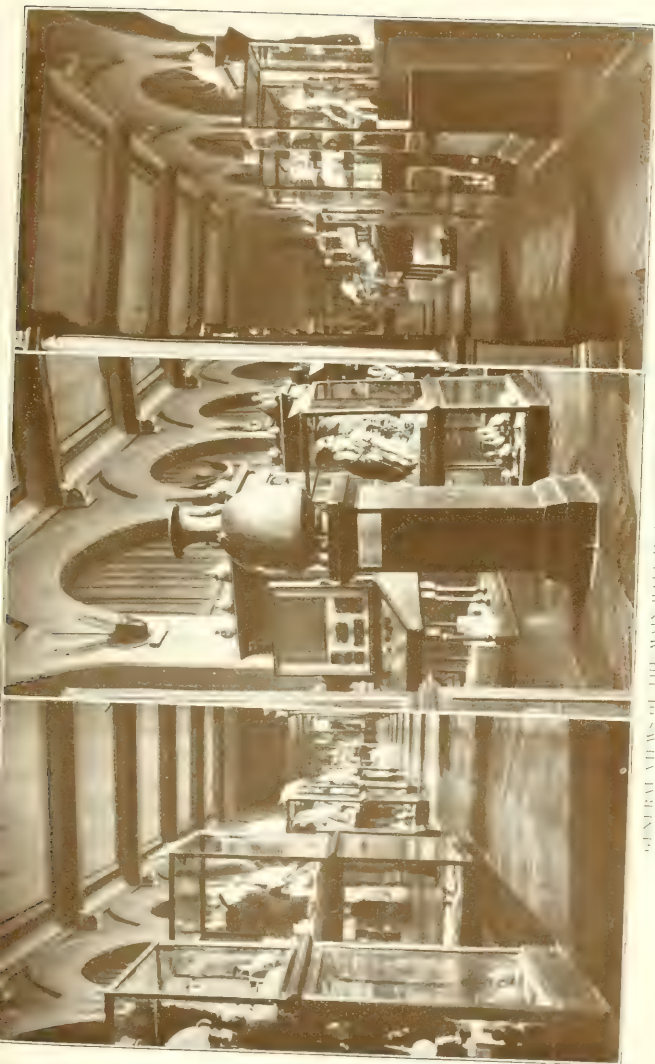
The exhibits of smaller articles from other countries consist of a large collection of graceful funeral urns and an extensive assortment of large and curiously carved arrow heads from Argentina; hundreds of statuettes and odd glazed pottery from Colombia; beautiful feather and bead work and pottery from Ecuador; carved wood, feather work, and ceramics from the Guianas; a collection of handsomely carved "juacales" or drinking cups fashioned from coconut shells. These are made and used by the Indians of Guatemala, and this collection was presented to the museum by Monsieur Langlade, at one time French consul to that country. Lower Peru shows an unusual assortment of artistic pottery—many of the pieces being black in color and fashioned to represent monkeys, birds, and fish. Basket work and clay figures make up the exhibit from Venezuela.

Down the center of the long hall, on separate pedestals, are the larger and more unique objects—the most curious of which are several mummies. One is from Comatlan, State of Oaxaca, Mexico; another was found in the Piedra Grande Mountains near Chachapoyas, in the Department of Amazonas, Peru, and a third, the skeleton of a woman, discovered in a tomb of the Inca period, at Ancon, in the Department of Lima, Peru. The weird, grotesque figures are especially well preserved and are unusual in that they are so doubled up that they appear to be sitting or squatting.

Under glass stands a porphyry statue of Quetzalcoatl, the principal Toltec divinity, a gift to the museum of Mr. Pierre Lorillard, and directly in front of it is a stone idol, grotesquely representing a Toltec chief. Attention is called to two curiously shaped granite chairs, or seats, which were discovered near Manta, in Ecuador, and to two vases, the most artistic and graceful objects in the room. One is a terra-cotta urn found in a grotto at St. Sebastian, near Cuzco, Peru; the other a large vase beautifully decorated in relief, which comes from Lake Titicaca. The most unique object, however, among all these treasures is without doubt a skull, wonderfully carved from a solid piece of rock crystal. It is supposed to have been a pendant on the mantle of the statue of Huitzilopochtli, the War God of the ancient Mexicans.

The United States is represented in this hall only by several figures of Indians in native costumes and one or two cases containing beadwork and some stone implements found in southern California.

We pass now into the second large hall, where we find an interesting collection of miscellaneous objects. The upper half of the wall is artistically frescoed with scenes from Peru, Mexico, and the United States. The lower half is covered with maps and bas-reliefs from the ruins of Copan, Palenque, and Quirigua. A copy of the great calendar



GENERAL VIEWS OF THE MAIN HALL IN THE FROEDBERG MUSEUM AT PARIS.

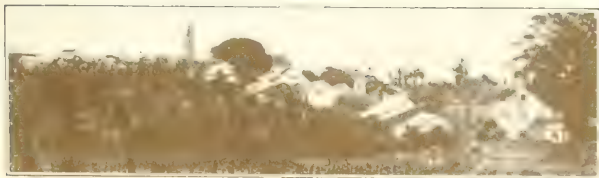
The hall is a large, high-ceilinged room, with a series of large windows on the right side. The exhibits are arranged in a series of glass cases and on tables. The hall is a large, high-ceilinged room, with a series of large windows on the right side. The exhibits are arranged in a series of glass cases and on tables.

stone occupies the center of the wall and just below stands a cast representing Tlaloc, the God of Rain. A huge monolith from Teotihuacan, Mexico, towers beside a copy of the Great Sun Stone which was found in 1790 in Mexico City and which is preserved in the National Museum there. The most interesting of the other larger casts are those of the sanctuary of the Temple of the Sun at Palenque, and a part of the main stairway, showing the curious carving which adorns each step. There is one piece of genuine stone bas-relief from Tiahuanacu. A large case contains 39 beautiful urns dug from graves at Ancon and Chaucay in the Department of Lima, Peru. Near by stands a colossal stone Chicha vase, also from Lima, and a large stone monkey from Amazonas, Peru. At the end of the hall is a boat from the Orinoco River. This is hewn from a solid log and fitted with curious wooden sails.

Several relief maps show the explorations at Tula and Teotihuacan carried on by the expeditions which were sent by the State in 1880, under the direction of M. Desire Charnay, the traveler and explorer. Many of the museum's treasures were brought back by the members of these exploration parties. Another map shows a pueblo of Tegna, northeastern Arizona, a gift of the Smithsonian Institution and a reproduction of the homes of the cliff dwellers.

It would be wearisome to the reader to go over in detail the contents of this museum, and this is only a rapid and superficial survey of the interesting and valuable treasures gathered here for the benefit of student and tourist, and as we walk through these halls we get the impression that they are being faithfully guarded by the 22 life-sized figures clothed in the beautiful and gayly colored costumes of the native tribes of the various countries of the New World.





A CASCADE IN BRAZIL

A SHOWER of molten silver falling into a caldron of pitch.' Such was the simile that forced itself upon my mind when standing behind the waterfall of Iherval. This remarkable cascade drops over a sheer precipice 400 feet high, the water falling so far out from the rock that one is enabled to walk along a ledge and stand behind the falling water and gaze through it down into the abyss below, black from being inclosed by hills and slimy from the spray of the fall.

Staying a few days at Hamburgo-Berg, in the State of Rio Grande do Sul, and being in the vicinity of the fall, I decided to make the journey to it, and went by rail to Sapyranga, 16 kilometers north on the railroad line connecting Porto Alegre with Taquara. At the hotel where I had my morning meal, which consisted of the inevitable, but nevertheless well-prepared, rice, eggs, and feijão, or black beans, I made some inquiries as to the distance of the fall and the difficulty of reaching it. I was variously informed by different authorities that it was 2 leagues, 4 leagues, four hours' journey on horseback, seven hours' journey on foot, an interminable distance, and not far. The traveler in the interior of Brazil soon learns to regard the information he gets from the country people with considerable caution, and will find in its bewildering unreliability a source of amusement. Armed mentally with the valuable knowledge of the road I had obtained from the good people of Sapyranga, and fortified physically by the excellent almoço I had gotten at the hotel, I started off on foot, not caring to risk my expensive photographic apparatus on horseback. Having spent some time in Japan with rice as a principal article of diet, and remembering that the Japanese rikisha runners are enabled to effect prodigies of endurance on a rice



Photography by Reginald Corbom

THE CASCADE OF HERVAL, RIO GRANDE DO SUL, BRAZIL.

A shower of molten silver falling to a cañon of pitch. The remarkable falls drop over a precipice of 400 feet high, the water falling far out from the rock.

diet, I had reasonable hopes of reaching the end of my interminable journey before nightfall.

The visitor to Brazil who judges the country from a cafe on the Avenida Central in Rio de Janeiro might think that the Brazil of the story books exists no longer. A trip into almost any part of the interior would soon prove his idea false; my road lay through a beautiful mountainous district thickly clothed with tropical and semitropical vegetation, royal palms and bananas being much in evidence. Gorgeous butterflies, strange monkeys, and wild birds excited my wonder at every moment, the most tropical in appearance of the latter being the brightly colored parrots and the big-billed toucans, their harsh cries resounding through the woods. Now and then a clump of royal palms would half hide a dainty little farm house; from time to time would pass along the road a "carreta" or rude mule cart, used in the interior; and Old Sol did his best to make me realize that it was Brazil in reality by illuminating everything with the intense brilliancy of his vertical rays.

Up and up and up I went, and after some time met an aged man on the road. "*Isto é o caminho para a cascata, não é, senhor?*" I asked him. "*Ich kann nicht verstehen. Können sie nicht Deutsch sprechen?*" was all the reply I got from him. What an interesting example of the thoroughness with which the German colonists have established themselves in this part of Brazil!

At last I reached the summit of the road and was informed that the hotel near the fall was only five minutes' walk down on the other side; walking on for 15, I came to it, and, after arranging for my stay overnight, joined a party of people who were about to set out for the cascade. A scramble through the bushes brought us to the ledge in the precipice nearly at the top of the fall. Through the semidarkness of the trees we could see the large volume of water falling, causing a weird effect through being itself in the bright sunlight. Passing directly behind the waterfall we could look downward nearly 400 feet and see the rocks and trees below shining with spray, which, being almost entirely inclosed by the walls of the gorge, remained in deep gloom. Following the path back of the fall, a few minutes' scramble through the trees down the steep cliff brought us to the bottom, whence a good view of the whole cascade could be obtained. Although a good distance from the fall itself, we were wetted through by the spray that filled the gorge like steam. The impressiveness of the scene well repaid me my arduous journey.

A project is under consideration for the utilization of the power of this fall, and it is expected to supply electric energy to the district between Porto Alegre and Taquara. A number of industrial establishments are situated in this locality, notably several machine

shops, and also in the town of Novo Hamburgo, two up-to-date shoe factories, all of which could use electric power to advantage.

The fall seems to have no particular name beyond that of the small village near which it is situated—Herval. This name is a general one for the locality, which is also known as the *Thei Wald* in German, both names seeming to have reference to the yerbamate, which was at one time found there in abundance.

Between the small town of Sapyranga, the nearest point on the railroad, and the waterfall, a distance of 25 kilometers, an excellent road has been constructed by the State government, which on the

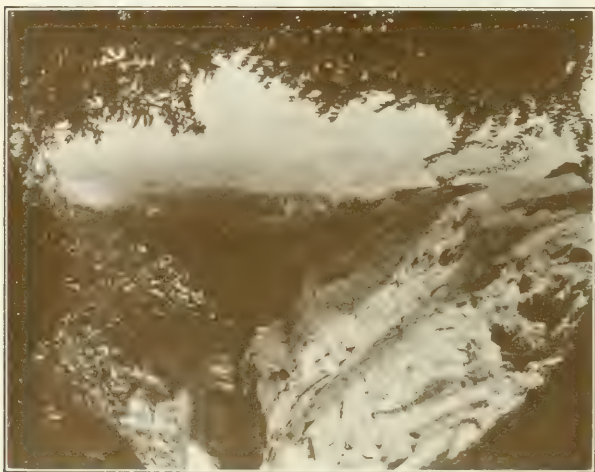


Photo by Leonard C. Dean.

BACK OF THE WATERFALL OF HERVAL.

On the right can be seen the narrow ledge in the cliff which it is necessary to pass to reach the falls.

day of my visit had been traversed by an automobile without any difficulty. This road would appear to have no little object but that of providing a ready means of reaching the fall, as in the whole distance I passed less than a dozen scattered houses, and near the fall itself there are only half a dozen besides the hotel. It comes as a surprise to one to find a telephone installed at the inn, such an antiquated and lonely building. In many parts of the interior of Brazil excellent long-distance telephone services are in operation, and the instruments will be found in the homes of the humblest inhabitants.

My trip to Herval recalls to my mind an incident in connection with it. Returning one evening in Hamburgo Berg from a little stroll, I was overtaken by a sudden shower of rain, and to avoid getting wet took shelter in front of a house by the wayside. A voice from the interior of the house invited me to enter, and a moment later I was being made welcome with true Brazilian courtesy by the aged couple who inhabited it. On learning that I was on a visit from the States they took quite an interest in me, and the old lady hustled out of the room, and in a minute came back bearing one of her most treasured possessions to show me. It was a card bearing the name of Charles Page Bryan, envoy extraordinary and minister plenipotentiary of the United States of America. It appeared that he had accidentally been in the same house seven or eight years previously, and the couple had carefully preserved his card ever since, remembering his visit as if it had been the day before. I got to be quite friendly with the old people right away, and they spoke in such glowing terms of the great waterfall that I was thereby induced to make the excursion.



"AN UNKNOWN PEOPLE IN AN UNKNOWN LAND."¹

OF all the remarkable books that have recently been written dealing with primitive and unusual conditions in the remote interior and little-known sections of South America, perhaps none excels in vital interest and ethnological value the work published under the above title. It is the narrative of the actual experiences and observations of a remarkable man, picturing in simple, untechnical language 20 years of his life spent under extraordinary conditions among a primitive, uncivilized, and from our viewpoint, barbarous people.

In many respects the book resembles the work of that eminent German explorer and ethnologist, Dr. Koch-Grünberg, in his *Zwei Jahre unter den Indianern*, and what he accomplished in enlightening the world relative to the customs, modes of life, morals, superstitions, and actual conditions of the hitherto unknown tribes of Indians inhabiting the region between the Rio Negro and Yapura River in Brazil, that has Mr. Barbroke Grubb succeeded in doing relative to the Indians of the "Gran Chaco."

The fact that the former is a scientist, trained to close study and observation, whose sole purpose was to add to the sum of human knowledge relative to primitive man; while Mr. Grubb is a missionary with whom the ethnological study of the people with whom he lived was incidental and subsidiary to his efforts to improve their spiritual condition and to make converts to his religion, must not be lost sight of. Allowance being made for this difference in the training, preparation, and purpose of the two men, one is inclined to think that the work of Mr. Grubb is fully as remarkable and deserving of even more credit than that of the great German explorer.

The Gran Chaco is the name given to an immense alluvial plain which lies in the interior of South America, west of the Parana and Paraguay Rivers, and extending from the southern part of Bolivia through Paraguay and into northern Argentina. It comprises an area of over 200,000 square miles and except some of the settlements along the rivers and near the extreme boundaries of the region, is inhabited and practically under the domination of the descendants of

¹ "An Unknown People in an Unknown Land." An Account of the Life and Customs of the Lengua Indians of the Paraguayan Chaco, with Adventures and Experiences during Twenty Years' Pioneering and Explorations amongst them. By W. Barbroke Grubb. Edited by H. T. Morrey Jones, M. A. (Oxford). With illustrations and map. Third Edition. London: Seely, Service & Co. (Ld.). No. 18 Great Russell Street, 1911. Price, 5 shillings.

the Indian tribes who dwelt there when Juan de Solis discovered the great estuary of the Rio de la Plata in 1506 and with whom Sebastian Cabot came in contact when, in 1526, he discovered the Parana and Paraguay Rivers.

The remarkable contrast offered between the civilization to be found on the east bank of the Paraguay River and the primitive, uncivilized conditions which still obtain on the west bank in the Chaco region is thus graphically depicted in the opening chapter of Mr. Grubb's book:

At night on the Chaco bank may be seen the half-naked forms of Indians as they move to and fro in the flickering light of their camp fires which but dimly illuminate their rude shelters, standing in a clearing in the dark forest which forms a background. The painted faces and plumed heads of these savages enhance the weirdness of the scene. The sounds which greet the ear are equally barbarous. A low droning chant may be heard, accompanied by the rattle of gourds, and broken only too often by the shrill cry of pain when a child, perhaps, has been cruelly murdered, and the women's voices are raised in lamentation. Yet from this bank at the same moment may be plainly heard the loud shriek of the siren of a large Brazilian passenger steamer as she nears the port of a Paraguayan town just across the river, with the bright rays of her electric light streaming from her saloons and decks, and the twinkling lights of the town dotted along the opposite bank easily distinguishable in the distance. * * *

On the eastern bank of the River Paraguay we find large, modern cities with a civilization, in many cases, far in advance of some of our European towns. It is strange indeed that, with only a few miles dividing them, you see on the one bank primitive man as he was centuries ago, and on the other the highly-cultivated European, both equally ignorant of the life of the other. It seems almost incredible that, for nearly four generations, civilization and Christianity have sat facing barbarism and heathenism, and yet have stood wholly apart. No great and impassable barrier has divided the two; on the contrary, the crossing from one bank to the other is simple, and, even under the most unfavorable circumstances, a matter of only a few hours. One of the finest lines of river steamers has been plying far up the course of the River Paraguay for many years, and communication has been regularly maintained between Europe and these regions.

It was in 1889 that Mr. Grubb, then a young man of 23 years, was sent to the Chaco by the South American Missionary Society. A small temporary station had been established among the Lengua Indians at Riacho Fernandez, an island in the Paraguay River about 30 miles north of Villa Concepcion, by Adolpho Henrickson, an earlier missionary who had died from exposure. It was at this station that Mr. Grubb made his first stand and acquired a very limited knowledge of the Indian language. Regarding the plan of civilizing the tribes and winning over to Christianity the few individuals who could be attracted to this place, as impracticable, the young missionary set out early in 1890, alone and practically unarmed, for the interior, notwithstanding the warnings and pleadings of the Paraguayans and Europeans who knew of the dangerous character of the various tribes of the Chaco. Several comparatively recent exploring expeditions had ended disastrously, in some instances whole parties



INDIAN STALKING DEER IN THE MOUNTAINS OF PERU.

It has been said that the Indians of the mountains of Peru are the most skillful hunters in the world. They are also the most daring, and are often seen stalking deer in the most dangerous places. The Indians of the mountains of Peru are also the most skillful hunters in the world. They are also the most daring, and are often seen stalking deer in the most dangerous places.

sionally even a hunter is the victim.

having been annihilated. Dr. Creveaux, the celebrated French explorer, who had entered the territory from Bolivia with a party of 14 men, had met his death at the hands of the Indians, only one boy having escaped to tell the tale. Ibaretá and a party and also Boggiani had made explorations, the former along the River Pilcomayo and the latter in the northern Chaco region, and both parties had been massacred. Tales of terrible cruelty and barbarism on the part of interior tribes were told, but with that peculiar zeal and utter disregard for personal danger often characteristic of the youthful missionary, Mr. Grubb adhered to his plan and eventually penetrated far into the interior and began his extraordinary life.

At first he met with distrust and suspicion and it was probably only through his tact and courage and wonderful insight into the Indian character that he escaped death. His absolute fearlessness, his trust in their good will, evidenced by his coming and going amongst them alone and unarmed, seems to have first aroused their wonder and probably their superstitious belief in his superior powers, and as time went on his clean life and fair dealing, his participation in their hardships and his sympathy in their sorrows and help in their times of need, won their friendship and trust and they began to regard him as one of their own people and invested him with all the power and influence of a chief. It was thus that he was enabled to study their inmost lives, their customs, their superstitions and religious beliefs, and after once gaining their confidence he was enabled to appeal to their better nature and their reason and succeeded in disabusing their minds of many superstitious fears and the barbarous customs which had resulted therefrom. His work and that of the other members of the mission who subsequently joined him has been wonderful, and is still going on, so that now Mr. Grubb is called the "Pacifier of the Indians." In summarizing the work he says:

"Where formerly it was dangerous for a white man to go without an armed party, anyone can now wander alone and unarmed, so far as any risk from the Indians may be apprehended, over a district rather larger than Ireland. In a country where 15 years ago there were no tracks other than Indian footpaths resembling sheep tracks at home, now about 450 miles of cart road have been made in order that the mission bullock carts might readily traverse the country. Where formerly tribal war was common, peace has reigned for many years over a district as large as Ireland and Scotland combined.

"Only ten years ago it would have been impossible for any one to establish an estancia (cattle ranch) in the interior. The wire fences would have been cut and the cattle stolen and killed, and it is highly probable that those tending them would also have run great personal risk. Through the direct instrumentality of the Mission a large English company, with its headquarters in London, has now been



1. SPINNING SPINDLE

hard wood, the pointed end of which is passed through a small gourd. The spindle a sharp twist and allowing it to turn in the air or on a smooth pigskin, the woman meanwhile removing all irregularities until an even thickness is obtained. She repeats the process until her spindle is full. After the spun thread has been wound into a ball for convenience, two or more strands are

established at a point more than 10 leagues in the interior, where they possess 250,000 acres of land, and employ Indians, together with Paraguayans; as cowboys, and in fencing and transport work."

To the layman, however, interested in the study of primitive man, the paramount interest of the book lies in the detailed descriptions given by the author of the modes of life, occupations, superstitions, and religious beliefs of the people with whom he lived, many of whom had never seen a white man before Mr. Grubb came among them. In dealing with their modes of life and their environment the author gives us such graphic and interesting pictures as the following:

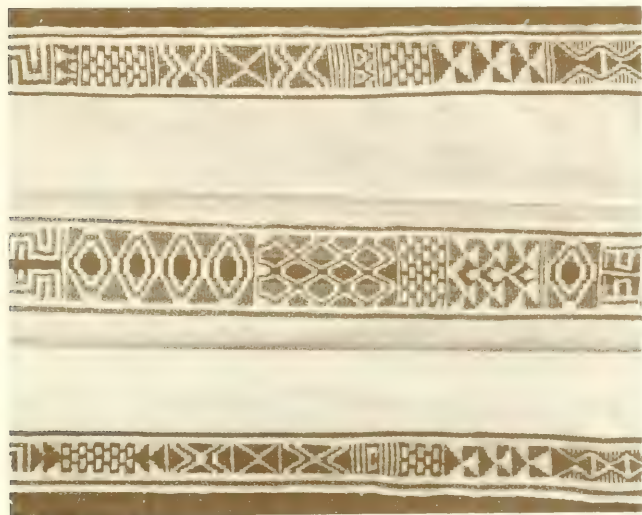
The Indian is perfectly suited to his environment; even his picturesque costume and the ornamental painting with which he adorns his body is in perfect harmony with his surroundings. The colors blend so beautifully that there is no doubt whatever that the Indian has, in a very great degree, the idea of fitness and harmony. In order, therefore, to depict the country in which he lives, let us take one or two localities as illustrations, and try, by means of a few word pictures, to present some typical scenes to the reader's eye.

The first is an Indian village, situated on a piece of open land. At a little distance to the north flows a sluggish river, the current so slight as to be almost imperceptible. The banks are thickly covered with weeds, bulrush and papyrus rising high above the rest, and dense masses of floating water lilies spread out at the roots of trees. Dark tree trunks, which have drifted down in flood time, rise here and there out of the water like huge, ugly reptiles. The stream, which is in reality about 50 feet wide, can only be recognized by a little clear water free from weeds in the center. Close to the bank is a fringe of palm trees, which rear their tall branchless stems 40 feet or more into the air, crowned by a single head of green, fanlike leaves. The remains of last season's brilliant green crowns droop below in a cluster of dead leaves. A few shady trees are dotted here and there, which form a welcome contrast to some headless palms and dead stumps—killed by the destructive palm beetle. On these gaunt stems lazy waterowl are perched, calmly viewing the scene around them. In the water an occasional splash is heard as a sluggish fish jumps at a water insect or seeks to escape from a fierce foe beneath. Here and there what seems a dead black log is visible, but what in reality is an alligator asleep or slowly moving among the reeds. * * *

The Indian village close at hand consists of two lines of the most primitive dwellings imaginable, constructed simply of boughs of trees fixed into the ground, which are interlaced together and covered with grass and palm leaves loosely thrown on. This rude shelter keeps out the torrid rays of the sun, and to some extent the tropical rains. Little space is allowed to the family sheltering beneath. The furniture consists of a few household utensils of the most primitive description, and skins, which serve as seats by day and beds by night. The simple weapons of the savage rest near, or are stuck into the grass roof above. The household fires of wood smoulder a yard or so in front of each shelter. Women sit here and there gently swinging a baby in its string hammock or industriously spinning. One is to be seen seated at a loom, made of four branches of a tree, weaving a blanket for the master of the house. The other women sit in little groups, passing round the pipe, and gossiping over the news of the day.

There is nothing sad or dull in this little assembly; with bright, cheerful faces they are enjoying their simple life perhaps more keenly for the moment than their more highly cultivated and civilized sisters. Two or three old men are about; one of extreme age is sitting cross-legged on his mat, apparently thinking of nothing.

Principles the structure, they are to be seen around the naked body, which he occasionally thickens with a piece of cloth attached to the end of a thin stick, which enables him to reach those which he wishes to settle in remote parts of the back. A few children, very few, it must be admitted—disport themselves around the booths in nature's garb. As it is midday, the few sheep and goats are resting here and there in the shade lazily chewing the cud. The men and lads are out hunting, some in the forest for the honey, of which the people are so fond, and which they collect in skin bags—comb, larvae, young bees, and all. Others are out on the great ant-hill plain in pursuit of the



SECTION OF A L'NGVA WOOLLEN ANKLE BAND

are skillfully woven.

ostrich or the deer, while the rest are to be seen in the distance by the river bank with hook and line, the hand net, or the fish trap, and some even with bow and arrow, seeking for the large fish that play in the shallow waters.

This pleasing picture of the simple life affords a momentary glance at the pleasant features only of Indian life and the next description shows the terrible conditions which prevail when an epidemic of

smallpox seizes upon a tribe. The picture now is horrifying in the extreme. At best these villages are but temporary affairs, and should a death occur from any cause the fear of ghostly visitants drives the people from the uncanny spot. The village is abandoned, the few possessions are gathered together, the huts are burned, and a new location is sought. The terror that haunts the Indians by day and by night is that of the spiritual, the dread of demons, ghosts, and witches, and these imaginary fears play a large part in making them nomadic, although other material considerations also force them to wander from place to place. The author writes:

The Indian is a nomad, unable to remain long in any one place, for he is driven by resistless forces from one part of the country to another. The seasons are never certain; for nearly two years at a stretch I have known vast regions almost waterless. Consequently the game are compelled to seek in distant parts for the little water that is left, and the Indian perforce must follow it. Gardens cease to produce harvests, the swamps and rivers are dry and fish are unobtainable. Various kinds bury themselves deep in the mud at the approach of drought. Eggs are deposited, and not until much-wished-for rains fall do they once more spring into life, multiply rapidly, and teem as formerly.

In addition to the necessity of obtaining a livelihood, and the fears of what to him becomes a haunted place, the spirit of restlessness is fixed upon him by generations of the past and the inherited habit of wandering.

And yet these people, without a habitation and a home, living the crudest, simplest, hardest of lives, regarded as the lowest of barbarians by the members of the white race who know of them, have a philosophy of life and religious ideas which under the circumstances are marvelous. Having lived with them for 20 years and so far gained their confidence as to be regarded as one of them, Mr. Grubb had every opportunity to familiarize himself with every phase of Indian thought, for he had learned their language and was preaching the Gospel to them in their own tongue. His chapter dealing with their religion is of absorbing interest and ends with the following summary:

The Indian's idea, therefore, is briefly this, that there was an original First Cause, a Creator who planned and made everything, but that he now takes no part in the governance of the universe, and, therefore neither rewards nor punishes.

The Indian appears to be a believer in simple and natural laws only. He believes that a man prospers and is happy in this life and the next in so far as he abides by these natural laws, and that he suffers and is punished when he infringes them. To a certain extent this is very true—heaven and hell are of man's own making. The Indian, of course, has no idea of a fall from primitive purity or of an atonement for sin—that is, an atonement made by some perfect being on behalf of the imperfect—and no idea of the resurrection of the body.

He regards the soul as immortal; in fact he can not conceive the possibility of man's personality ceasing to exist. The after life is to him simply a continuation of the present, only in a disembodied condition. He does not regard the future life as a greater, happier, and better existence, nor has he any knowledge of a future state of

punishment following on an evil life led in the body. He regards the body as the only means by which the soul can really enjoy itself, and he has little, if any, idea of intellectual or spiritual enjoyment. He accordingly does not view the life after death with any real pleasure, for to him life in the disembodied state will be dull and void. But, on the other hand, as suffering to the Indian means practically only physical suffering, so in the after life, although he will be debarred from pleasure, yet he will also escape from much, if not all, of the pain, sorrow, and trouble which attend him in the present.

Holding as he does that the Creator takes no interest in the affairs of man, he naturally renders Him no worship; in fact, he worships nothing; and his efforts are confined to avoiding the consequences of evil-doing on earth and to warding off the malignant *kilyikhama* (spirits), who, he holds, are continually seeking to mar his happiness.

The Indian, like men of other races, possesses the ordinary natural instincts—love for his friends, parents, and children, sympathy with others in distress and in trouble, and the like. Beyond this his object in life is to gratify his desires as far as possible without getting himself into trouble.

What a pity that such a plain, simple, practical working philosophy of life should be marred by the dread of demons, spirits, devils, and similar superstitions.

Another remarkable feature of Indian life in the Chaco, which, according to Mr. Grubb, has had much to do with their degeneration, is their economic and social system. The features of this system as it has existed among them for at least 400 years are summarized as follows:

The land belongs to the people generally, and no Indian, not even a chief, has any direct claim to any part of it over his fellows. No Indian is encouraged to have more possessions than his neighbor. Their flocks feed on the common pasture, and they only lay claim to their gardens while actually cultivating them.

The natural products of the country, such as game, honey, wild fruits, fish, and firewood, are the common property of all, and native law enjoins the widest hospitality.

Every man is supposed to hunt. There is no such thing as a leisured class, not even among chiefs. There are really no social distinctions, the chiefs only holding rule when it is for the common good, such as in time of war.

There is no law of inheritance. The clan is to a great extent as responsible for the children as the parents themselves; and the education and maintenance of the children are tribal matters rather than parental. Children are supposed to have as much liberty as possible.

As far as law goes there is very little restriction in marriage.

The aged must be kept at the expense of the community, as also the sick and disabled.

Competition in the way of one man striving to rise superior to his fellow man, to rule over others or to better himself at their expense, is strongly discouraged and almost nonexistent.

Those who have been traveling, and therefore not able to produce crops, or those who for any other reason have no means of subsistence for the time being, have a claim on the community.

Passing from this summary to fuller details the author endeavors to show how four centuries of their peculiar social system have affected the Chaco Indians.

There is among them as much diversity of ability, strength, and energy as amongst other people; but the able agriculturist who could, if he would, acquire a large and



COURTESY OF SEELEY A. C. LTD., LONDON.

WOMEN DANCERS AT A "YANMANA."

One interesting feature of Chaco Indian life is the holding of periodic feasts. One of these, the "Yanmana," is connected with the coming of age of a girl, and is described by Mr. Grubb as follows: "The girl sits in a specially constructed booth with one or two girl companions. She is daily ornamented, and for the first time, a lofts the longer skirt of the women. She ceases at this feast to be a child. The women dance by themselves, each holding a long cane with a bunch of deer's hoofs tied at the top. These they strike on the ground, producing a loud jangling sound, marking time to a chant. Forming themselves into a ring, they keep a regular step as they circle round. An old woman in the center rattles her cane and keeps step with the others, chanting with them, but in a louder tone. She goes through many strange contortions of the body, at times pretending to tear out her own hair. The men also form into circles, each holding a gourd filled with seeds and small shells, which they rattle, keeping time to a chant. The boys, dressed in ostrich plumes, wear masks to represent evil spirits, and, running one behind the other, move in and out among the crowd jangling bunches of hoofs and from time to time uttering prolonged shrill cries. When they circle round near the girl the women drive them off.



COURTESY OF SEELEY A. C. LTD., LONDON.

A SEARCH EXPEDITION.

Exploring expeditions into the Chaco district, owing to the antipathy of the Indians to all foreigners, have been attended by great danger. Some time after the advent of Mr. Grubb into the Chaco mission held an expedition to the River Pilcomayo was organized under the leadership of the explorer Ibaretta. Nothing being heard from the expedition for some months, a searching party was sent out to attempt to find traces of the explorer, and the picture shows this party on the march to the River Pilcomayo. No traces were found, and subsequently it was learned that only two members of the Ibaretta party escaped with their lives.

productive plantations by the Government, which by their aid might be able to maintain his own family and dependents comfortably, refuses, in obedience to the socialistic law, to work for the support of others of whom he does not approve. Accordingly he produces no more than is absolutely necessary for present needs. He never saves anything against the day of adversity, because others are not doing the same, and therefore if he had a store in reserve the thriftless would step in and share it with him. The clever hunter can bring in abundance of game, but he sees no use in unduly fatiguing himself and is content with supplying his own immediate needs and the wants of those whom he desires to help. The natural result is that the Indian, in course of generations, has become thriftless, lazy, selfish, and has lost to a great extent all kind feelings for those outside his own immediate circle.

To prove the truth of his conclusions the author gives numerous concrete examples illustrating the Indian's viewpoint, such as the following:

I once asked a smart and capable Indian, a settler and one who had had under cultivation to better advantage. He agreed that the soil was good and that with comparatively little more effort he could treble the amount of produce. He also admitted that he understood well how to preserve his maize and other products, and thereby secure himself against hunger, and even against the short rations which cause the Indian much suffering for a considerable part of the year. But he argued that it would not benefit him if he were to do so. He mentioned several of his clansmen and bade me look at their tiny gardens, saying: "If I grow large crops, these men would grow still less, and according to our custom they would become my uninvited guests, and the surplus over and above what I now have would go to them instead of my family. Were I to garner my crops and keep them for a time of scarcity, these men would not exercise equal thrift, and knowing that I had a stock they would call upon me."

The Indians build miserable dwellings, small, cramped, and affording very insufficient shelter, and yet when employed by us to build a hut on native lines for ourselves, they can speedily make a very satisfactory one. When I rebuked them for not making better shelters for themselves, they replied: "If we built a large and roomy hut, others would claim our hospitality in bad weather. Why, therefore, should we exert ourselves to save others the trouble?"

To the disciples of Karl Marx and our modern socialistic reformers we leave the refutation of Mr. Grubb's argument against socialism as it works out in practice. The chapter in his book entitled "Indian Socialism" may give them some food for thought.

The author deals with the arts and industries of the Chaco Indians in a detailed and most interesting manner. Hunting and fishing are the chief occupations of the men, not in the way of pleasing pastimes but for the sake of procuring food. Gardening is carried on to a limited extent, the principal products being pumpkins, sweet potatoes, maize, mandioeca, and tobacco. Suitable soil is found only in small patches, and the extremes of drought and floods make large crops impossible, while ants, locusts, and other insects add to the difficulties of agriculture. The women are engaged in spinning and weaving blankets, making nets, hammocks, etc., and, considering their primitive

tive appliances, accomplish remarkable results. As to their dress the author writes:

The only garment worn by a woman is a skin petticoat, except in the very cold weather, when she wraps her whole body in a large mantle, made by sewing together a number of skins, either of the nutria (a species of otter), sheep, small deer, or fox, wearing it with the hairy side next to the body. The petticoat is sufficiently large to reach one and a half times around the hips, and falls to a little below the knees. The double fold runs down the front, and a woolen belt serves to fasten it. In the rough conditions of Indian life these skirts, being washable, are particularly serviceable garments and wear for many years. They are made from the skins of goats, sheep, or the smaller deer, and the longer they are worn the softer they become.

The man's only garment is a blanket made of wool, the manufacture of which is probably the most elaborate and tedious task of the wife. In some instances four months are consumed in the production of one blanket, but when finished it is quite a work of art.

The feasts, dances, and various kinds of celebrations are all vividly described by the author, who in fact gives the reader faithful pictures of every phase of Indian life and evinces such knowledge of these interesting people as could be attained only in the many years he dwelt with them.

An attempt by one of his trusted Indian helpers to murder Mr. Grubb was almost successful. He was left for dead by his assailant, alone in an immense forest, but with remarkable fortitude succeeded in forcibly extracting an arrow which had penetrated his lungs from his back, and was finally found in a semiconscious condition by friendly Indians, who cared for him until friends from the mission could be notified. The Indians subsequently killed the would-be assassin with their own hands to punish his crime.

The book, which bears on every page the convincing marks of truth, the faithful portrayal of actual facts, is as interesting as a delightful work of fiction, and it is with regret that the reader leaves *An Unknown People in an Unknown Land*, for after its perusal he feels as though these people were no longer unknown, and that, like Mr. Grubb, he has lived with them for many years.



AMBASSADOR HERRICK'S LUNCHEON TO HIS LATIN AMERICAN COLLEAGUES :

ON the occasion of the anniversary of Washington's Birthday on February 22, 1913, Hon. Myron T. Herrick, the United States Ambassador to France, tendered a delightfully enjoyable luncheon at the embassy in Paris. There were invited to this function the diplomatic representatives of the American Republics in France, the members of the United States embassy staff, and a number of other prominent men.

For several years past these functions have taken place at Paris and have been a splendid means of bringing together a distinguished group of men representing all the Americas and interested in promoting the common ties of friendship and better understanding between their respective nations. No more fitting day could have been selected by Mr. Herrick's predecessors who instituted this custom than the birthday of Washington, whose life and history have been an inspiration to nearly all the other American Republics and whose leadership in the struggles for independence has been emulated by the great and noble heroes of Latin America.

In welcoming his guests Ambassador Herrick said in part:

It gives me especial pleasure that you consented to honor me by becoming my guests to-day, for the purpose of continuing a custom, the idea of which was so happily conceived by my distinguished colleague, Mr. de Peralta, and my friend and predecessor, Mr. Henry White.

Better acquaintance among our respective countries is resulting in a greater liking, and a deeper mutual regard.

It seems most appropriate to assemble here in this French capital the representatives of the countries of the Americas—from the South, from the Central, and from the North—to observe the natal day of Washington, whose statues and monuments erected in enduring marble and bronze grace the public places of an admiring and appreciative people. For it is our privilege to remember, on this day, the steadfast sympathy and encouragement of France in all our striving for independent and free Government.

Washington no longer belongs to one country. The power of his example has so radiated and influenced the impulse of mankind that it has become an imperishable legacy to people born of many races. It is natural that we, of the Western Hemisphere, should unite in this commemoration, since we are the direct inheritors and beneficiaries of his vast achievement, which, viewed at this distance, seems to have been of almost divine inspiration. What he did wrought a change in the spirit of man, and marked an epoch in civilization. It was his clearness of vision which saw beyond



Photograph by Harris Ewing

HON. MYRON T. HERRICK,

U. S. Ambassador to France, who entertained the Latin American diplomatic corps resident at Paris on February 22, 1912.

speech and the delivery of the address, and the reception of the distinguished guests.

Within the hour, the celebration was over, and the guests returned to their homes and San Martin.

The patriots of the countries of America, who fought unselfishly for freedom implanted the enduring ideas and principles of self-government in the Western Hemisphere which have now become our indestructible assets.

It was to be expected that the radical change in the method of the government of people, as was inaugurated by our forefathers, would be fraught with long periods of unrest, agitation, and bloodshed. It seemed at times that free government was destined to perish from the earth, but through the indomitable energy and spirit of the people it is finally and surely conquering.

The period of our exclusiveness is rapidly passing. We are being brought into closer intellectual and commercial relationship with the world, which is more and more dependent on our stability. This fact is proving a substantial aid in the solution of some of our most perplexing domestic problems. With the opening of the Panama Canal is coming a greater economic activity in our part of the world, evolving new duties and new responsibilities, which we must soon assume. Our marvelous natural resources, the development of which is only in the beginning, is now drawing toward us, as never before, the attention and capital of the Old World. If we are to grasp the opportunity, manifestly ours, to do a world's work—which shall be a blessing to those of our time, and to those who shall follow us—we must settle speedily and permanently, each country in its own way, the internal disorders which cause apprehension and alarm abroad and are the real obstacles to the final peace and order, presaging a higher and more enduring civilization than the world has heretofore known.

These mutual understandings, common aspirations, and larger responsibilities are broadening us, and taking us out of the narrow world of isolation where mischief-makers are able to disturb and distract. Such an one has but recently appeared in our midst, who, like a truant boy standing on the shore, throws stones into the water to trouble its tranquil surface. The best method of putting to rout these troublesome people and of undoing their mischief, is better acquaintance and better understanding of each other's motives and purposes.

For this reason, I want to read you a letter which I received from Mr. Root a few days ago. It is in answer to one I had written him upon having my attention called to a speech he is alleged to have delivered in terms so contrary to the spirit of my countrymen's feelings toward our sister Republics and so at variance with the sentiments he himself had expressed on so many occasions, both at home and in the countries represented by many of you here, that I could not credit the truth of the utterances attributed to him.

The Ambassador then read a communication received by him from Senator Root, in which the latter denied in clear, strong, and unequivocal terms certain statements which have been published in some Latin American newspapers, and purporting to be his utterances. The ambassador's speech as well as Mr. Root's letter made a deep and favorable impression upon the guests, and the toast proposed by Mr. Herrick "to the memory of Washington, to the health of the Presidents of the American Republics, and to the continued prosperity of the countries under their guidance," was enthusiastically received.

His excellency, Sr. Don Manuel M. de Peraltá, the minister of Costa Rica to France, responding in behalf of his diplomatic col-

leagues, made a felicitous address in Spanish of which the following is a translation:

Mr. Ambassador: I have the honor to thank you on behalf of my Latin American colleagues and for myself for the kind opportunity you have given us to observe with you, as we did with your distinguished predecessors White and Bacon, the natal day of that illustrious man, now deified by history and ranked among the famous makers of nations.

Rightly do you call him the father of the country. There is not a man, not a people, not a State, not a race on our planet, that would not deem it honor and happiness to call him father, son, brother, fellow-citizen.

From the Far East to the land of the setting sun, who does not know Washington? Who does not admire his work?

What is the United States of America? What is that Republic, whose magnificent area, whose wonderful progress within its natural limits would astonish even Rome—the Rome of Octavio and the Antonys?

It is the work of Washington, strengthened and enriched by the wisdom of his successors; ennobled by their reverent regard for the principles of justice and the traditions of honor, on which is based the splendid edifice of the American Union.

In Washington we celebrate and honor the father of American liberty, the faithful guardian and keeper of the Constitution, the noblest example of personal disinterestedness, of political foresight, and of love of humanity, and we do not believe nor can we believe nor admit that any of his successors could or would wish to identify themselves willingly and knowingly with anything contrary to such principles and to such traditions.

When your representative statesman, Elihu Root, as messenger of peace and friendship, visited the Latin American Republics, everywhere he was enthusiastically received, everywhere his words found a sympathetic echo and impressed upon every mind the conviction that, as was said by one of your statesmen more than half a century ago, "What the United States wants for Latin America is the happiness of its people and free, stable, and progressive governments."

This conviction is to-day as deep and strong as it ever was, and Mr. Ambassador you may assure your illustrious compatriot and our friend, Mr. Elihu Root, that the false assertions of an unscrupulous journalist have not left, nor do they merit to leave, the slightest shadow in our mind.

But we shall remember with deep gratitude the intense indignation with which Mr. Root, and you, Mr. Ambassador, denied the assertions and affirmed the sincere and unswerving friendship which you profess for your sister Republics south of the Rio Grande.

This friendship, sincerely and loyally reciprocated, will be even more close when, the Atlantic and the Pacific oceans meeting and mingling to become one by the opening of the Panama Canal, the commercial relations of both worlds shall find new impetus, and you shall have made between them a new bond of indissoluble fraternity.

Men imitate nature; and just as science and faith move mountains and draw the seas together, so will they bring people closer together and dissipate the passing clouds that at times obscure but never hide the course of the sun—the sun which will shine forth with greater brilliance to light the pathways of civilization.

You have made reference, Mr. Ambassador, to the strong and steadfast sympathy with which France has encouraged all our strivings to secure free and independent government.

Let me remind you that Thomas Jefferson, the friend of Washington, his representative, like you, in France, and his successor to the Presidency of the United States, said that every man has two countries—his own and France.

Gentlemen, I propose the health of the President of the French Republic, and the health of the Presidents of all the Republics of America.

Ambassador Herrick's guests to the luncheon were: Sr. Manuel de Peralta, the minister in Paris of Costa Rica; Sr. F. Puga Borne, the minister of Chile; Sr. Enrique Rodriguez Larreta, the minister of Argentina; Mr. Nemours Auguste, minister of Haiti; Sr. Rafael de Miero, minister of Uruguay; Senhor Olyntho de Magalhães, minister of Brazil; Sr. Hernando Holguin y Caro, minister of Colombia; Sr. José Maria Lardizabal, chargé d'affaires of Guatemala; Sr. Melchor Fernandez, chargé d'affaires of Cuba; Sr. Dorn y de Alsua, chargé d'affaires of Ecuador; Sr. E. de la Fuente, first secretary of the Peruvian legation; Sr. Alcides Arguedas, secretary of the Bolivian legation; Sr. Arosamena, attaché of the Panaman legation; Mr. Henry Vignaud, honorary counsellor of the United States embassy; Mr. Robert Woods Bliss, secretary of the United States embassy; Capt. Frank H. Mason, United States consul general; Commander Henry H. Hough, naval attaché; Mr. Sheldon Whitehouse, second secretary of the United States embassy; Mr. Laurence Norton, private secretary to the United States ambassador; the Rev. Henry Watson; Mr. Elmer Roberts; Mr. Wm. Philip Simms, and Mr. B. J. Shoninger.



FOREIGN COMMERCE OF THE DOMINICAN REPUBLIC FOR 1912¹

A COMPREHENSIVE statement covering the foreign commerce of the Dominican Republic for the calendar year 1912 has just been received by the Bureau of Insular Affairs, War Department of the United States, prepared by the general receiver of Dominican customs, Hon. William E. Pulliam. From it THE BULLETIN is pleased to reproduce the following facts and figures which reveal the steady increase in the progress and development of that country:

Aggregate Dominican trade.

Value of imports and exports, 1912.....	\$20, 603, 146
Value of imports and exports, 1911.....	17, 945, 208
Increase, 1912.....	2, 657, 938

Contrary to the expectation expressed by many, a general political disturbance which continued practically for the entire year, did not cause a diminution of the country's trade, but in contrast the calendar year 1912 surpassed all previous records, and there were substantial increases in both branches—imports and exports. Such a development in the face of adverse conditions can be accepted as the best evidence of further expansion and future prospects. The value of exports aggregated \$12,385,248, representing a decided gain of \$1,389,702 over the year immediately preceding. Imports carried a declared valuation of \$8,217,898, likewise a gain of \$1,268,236 more than that of 1911. As the figures indicate, and as has been in the past an established feature of economic conditions in the Dominican Republic, the balance of trade was decidedly in favor of the Republic, the difference being \$4,167,350. The increases for the year were general, relating alike to the principal articles for export and also to the various classes of merchandise which constitute the bulk of the import trade. Of the country's four leading products—sugar, cacao, coffee, and tobacco—all but the last named were exported in larger quantities than heretofore. An off year characterized the cultivation of tobacco, which was marketed in smaller quantities, and the political troubles doubtless had much to do with the decrease in the exportation of

¹ Values are in United States currency.

those raw materials, such as hardwoods, dyewoods, and beeswax, in the handling of which native labor is employed and native capital largely interested. On the side of imports large increases were recorded in nearly all the important lines, particularly iron and steel and manufactures thereof, which led with a total value of \$1,626,800, placing this class of articles for the first time in the history of the Republic in the front rank of importations.

Building materials were purchased in much larger quantities to meet the demand for numerous improvements under way at several of the ports. An American concern which has undertaken to install a system of electric light plants for the principal towns has its work well underway, and for its realization imported a large amount of all sorts of material and necessary apparatus.

The Dominican sugar industry has so increased that almost without exception the various estates have enlarged and are continuing to improve their plants by the introduction of the latest milling machinery of greater capacity. The total value of such machinery imported during the year was \$721,473. An encouraging fact also to be recorded is that agricultural implements were imported in larger quantities than ever before, which can be accepted as an indication of the effort made toward the material development of the country. Those interested in the progress of the Dominican Republic apparently have not been deterred by the unfortunate political disturbances, but the observation is in order that the advance would still have been much greater had there been nothing to mar the orderly administration of governmental affairs and bring about the disruption of public peace. Plows, cultivators, improved machinery, improved school furniture, and electric lighting supplies are perhaps better barometers of progress than the mere increase of business as shown by figures.

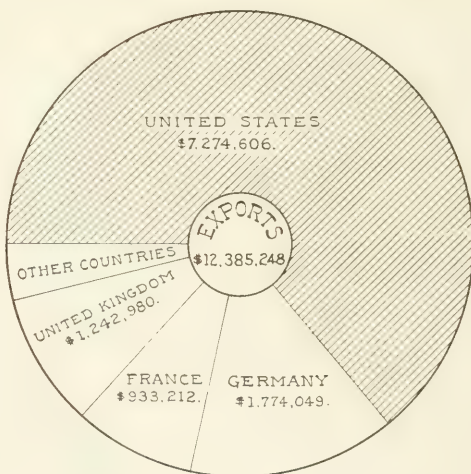
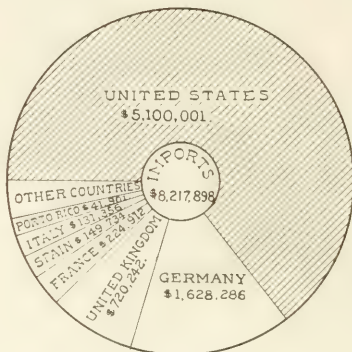
AGGREGATE TRADE.

An analysis of the total annual trade discloses the fact that the United States continued its commercial lead with the Dominican Republic, its sales and purchases aggregating in value \$12,374,607, an amount which represented something more than 60 per cent of the total, and a decided increase of \$2,493,300 over the previous year. The value of merchandise imported from and of products shipped to the United Kingdom reached a total of \$1,963,222, likewise an increase, in amount \$423,539 over 1911. In relative importance Germany occupied second place, though the volume of its dealings was less than in 1911. The German trade in 1912 was worth \$3,402,335, a decline of \$810,772 in comparison with 1911. The trade with France represented a value of \$1,158,124, a loss of \$136,037 compared with similar transactions of the year before. Participation in the trade by other

·DOMINICAN REPUBLIC·

- COMMERCE - 1912

\$20,603,146.



Note

PAN AMERICAN UNION

Exports and imports of money not included

countries has never been on a large scale. Next in importance ranked Spain, Italy, and Cuba, in the order named. With the neighboring island of Porto Rico there is a regular but small trade movement, which was much curtailed during the year on account of the presence of the plague, which had the effect of enforcing a quarantine against the steamers plying between ports of that island and Cuban and Dominican ports. Under the head of "Other countries" there was a valuation of \$1,284,641, an increase of \$724,776, explained by shipments of sugar to Canada.

ECONOMIC CONDITIONS.

The increased volume of trade discussed above resulted in a new record for customs collections. During the calendar year 1912, \$3,657,595.70 was the aggregate of customs returns, an increase of \$171,909.10, or a gain of nearly 5 per cent over 1911, which was the largest previous year.

From imports alone collections yielded \$3,328,082.75, an amount much in excess of the entire annual collections of some previous years, and from exports there was collected \$237,461.76, a total of \$3,565,544.51, constituting customs revenue proper as understood by the terms of the convention and on which the surplus division is made for amortization purposes. The surplus available over the \$3,000,000 mark was \$565,544.51, one-half of which, \$282,772.25, was made available and deposited to apply on the sinking fund. That amount, in addition to the \$1,200,000 segregated and deposited in monthly installments, represented a total of \$1,487,772.25, which has been deposited for interest payments and amortization of the Dominican bond issue, and was by far the largest amount so applied in any year since the establishment of the receivership. On a percentage basis the amortization fund received almost 2½ per cent of the principal, as against the 1 per cent minimum provision of the convention. The effect of the splendid collections of 1912, which were in continuation of the trade expansion reported in other years, offers the suggestion that the Dominican Government now is in a position to abolish all export duties thus giving further impetus to the cultivation of the principal crops of the country, and at the same time receive from imports alone a sum sufficient to meet ordinary requirements of the Government operating expenses and provide not only the minimum but increased amounts for application on the national indebtedness.

No exportations of currency were reported during the year. The declared value of importations of money was \$385,443.

Facilities for exchange of commodities with the outside were increased during the year by the opening of the port of La Romana, in the Seibo Province, which point has been the scene of considerable commercial and industrial activity within the past year and a half.

It is in the La Romana section that American capital recently has been invested in sugar lands, thus opening up a new field for that industry. The growing importance of the place is fully evident from the marked activity which has characterized it, both in a building line and the volume of its trade. Although the bulk of its supplies was furnished by coastwise shipments, regular importations commenced late in the year, with every indication that from now on the demand will be such as to give La Romana a rank in advance of some of the long-established ports. The American and German lines of steamships touching at Dominican ports have made La Romana a regular port of call. Direct importations were on a small scale to the close of the year, total value being \$16,051. During the one month of December exports valued at \$10,170 were shipped abroad.

Exports.

	Sugar (raw).	Kilos.	Value.
1912		88,775,297	\$5,841,357
1911		85,630,469	4,159,733
Increase		3,144,828	1,681,624

While the exports of sugar for 1912 showed a gain of but 3,089 tons ¹ over the year preceding, the prices realized were greater, so there was a difference in value of \$1,681,624 more than for 1911. In other words, while sugar exports increased at the rate of but 3 per cent, the return for the product advanced by 40 per cent as compared with the previous year. The production was curtailed by the political unrest prevailing throughout the country, causing some difficulty in procuring labor, while the centrals in the Azua district had not enjoyed the usual amount of water. As illustrating the development of the sugar industry in the Republic, it may be stated that since the year 1905 sugar exports have almost doubled. In that year exports of the commodity amounted to 47,308 tons, as compared with 87,205 tons for the year just closed. The area of sugar lands under cultivation was largely extended during the year, and it is safe to assume that under normal conditions the sugar industry of the Republic will continue to exhibit the steady growth which has characterized it for the past eight years.

Sugar exports constituted 47 per cent of the total value of exports for the year, and almost all of same went to the United States, United Kingdom, and Canada. Many of the shipments to American ports were made subject to order for possible transshipment to European markets.

¹ Calculations based on a ton of 2,240 pounds, or 1,018 kilos.



George N. Johnson, President, and George N. Johnson, Secretary, of the National Association of Manufacturers.



John W. Lamm, President, and John W. Lamm, Secretary, of the National Association of Manufacturers.

Cacao.	Kilos.	Value.
1912.....	20,832,602	\$4,248,724
1911.....	19,827,561	3,902,111
Increase.....	1,005,041	346,613

Under unfavorable conditions cacao continued to exhibit the steady increase which has marked the exports of this product during recent years. Its value represented 34 per cent of all exports. During the year just closed shipments showed a gain of 987 tons over 1911, while prices were slightly better.

The United States took the bulk of the crop, 14,375,010 kilos, compared with 9,230,878 kilos for 1911. To Germany went 3,624,627 kilos, or about half as much as that country purchased during the year before; while 2,832,965 kilos were exported to France, as against 4,307,582 kilos in 1911. Earnest efforts are being made to improve the present methods of drying the bean and preparing it for market so that it may secure the full price its intrinsic merit should demand.

Tobacco	Kilos.	Value.
1912.....	5,754,049	\$670,337
1911.....	13,831,189	1,421,424
Decrease.....	8,076,540	751,087

Tobacco showed a marked decline, and in this respect furnished a contrast to other Dominican products. However, the shortage, due to internal causes, is thought to be only temporary, and the probabilities are that not only will the yield be increased, but more care will be exercised in curing and assorting, thus improving the quality and realizing better prices in the future. As in the past, almost all of the leaf was sold in Germany, though France increased her purchases. Although exports of manufactured tobacco appear small, there were sent to the neighboring Republic of Haiti large quantities of what is locally known as "andullos," a rolled and pressed leaf for smoking, but its value appears under the head of leaf tobacco.

Coffee.	Kilos.	Value.
1912.....	2,259,147	\$566,167
1911.....	1,735,394	319,142
Increase.....	523,753	247,025

While the gain in production was but 515 tons, or 30 per cent, in comparison with the year preceding, the money value of the exported crop increased by 77 per cent, or \$247,025 for the same period. In terms of pounds, the grower received an average price of 11½ cents, as

compared with 8½ cents for 1911, or an advance of about 3 cents. The small increase in volume is due to the fact that throughout the entire island the crop has been below the average, so the showing for the country is considered very satisfactory.

The United States took 46 per cent of the entire crop, or 1,056,631 kilos, in comparison with 27 per cent of the crop and 475,934 kilos in 1911. Shipments to France represented 659,086 kilos, as against 905,087 kilos for 1911, or, in other words, France in 1911 took 52 per cent of the crop, and in 1912 took but 29 per cent. To Germany was shipped 391,174 kilos during 1912, as compared with 296,082 kilos for 1911, or a proportional share of the crop amounting to 17 per cent for each of the years in comparison. Italy received 134,990 kilos, as compared with 41,529 kilos for the year preceding.

Hides, goatskins:	Kilos.	Value.
Total:		
1912	133,284	\$97,181
1911	103,841	79,542
Per cent:	46.46	17.46
Cowhides:		
1912	347,332	122,391
1911	410,779	104,303
Per cent:	42.676	18.088

Both of these items showed substantial increases. Nearly all the goatskins were sold in the United States. Germany was the principal buyer of cattle hides. A large quantity of hides is tanned and used locally in the manufacture of shoes. A shoe factory well established at the capital imports the leather for the uppers, but tans its sole leather. During the latter part of 1912 sharp competition on the part of buyers of goatskins materially increased the price received by the producer.

Beeswax:	Kilos.	Value.
1912	8,360.4	\$111,746
1911	8,899.4	194,759

A decline was recorded for beeswax in 1912. Nearly all of this product is sold in Germany. Some shipments, however, were made to France and the United States.

1912	223,492	\$111,746
1911	389,841	194,759
Per cent:	57.33	57.41
1912	8,360.4	\$111,746
1911	8,899.4	194,759



WATER FRONT AT SANTO DOMINGO, DOMINICAN REPUBLIC.

Extensive improvements and enlargements are now in progress at Santo Domingo to meet the growing demands of its foreign commerce. During the year 1912 the total trade showed a remarkable increase of \$2,577,948 over the preceeding year despite many untoward circumstances. Shipping statistics also reveal substantial increases in the number of vessels arriving at the ports from foreign countries so that the extensions here as well as at Puerto Plata are concrete expressions of the country's prosperity.

Exports of bananas likewise were less, as only 223,492 bunches of this staple tropical fruit were shipped abroad, at a uniform price of 50 cents a bunch. The entire export crop is grown on one plantation at Sosua, in the Puerto Plata district, where local causes had much to do with the poor yield. All of the bananas went for consumption in the United States.

	Quantity.	Kilos.	Value.
1912.....	10,042	8,041,268	
1911.....	17,444	4,886,000	
Percentage.....	176.028	54.432	

Exports of this fiber during the year past (350,042 kilos) were more than double those in 1911. The United States purchased 213,259 kilos, or 60 per cent of the entire yield. The United Kingdom took 89,608 kilos, while to France and Germany were sent 34,865 kilos and 12,310 kilos, respectively. A slightly better price was obtained than in the year preceding, the average price per pound being a fraction over 13 cents, as compared with 12½ cents for 1911. The rapid growth of this industry is illustrated by the fact that since its inception in the year 1910 cotton exports have increased sixfold. The experiment of growing sea-island cotton in the fertile valley of the Yaqui, near Monte Cristi, of which mention was made in the summary for 1911, seems to have passed the experimental stage, and an increased acreage is being planted at the time of preparing this report. Other vegetable fibers valued at \$19,546 were exported during the year.

	Honey.	Gallons.	Value.
1912.....		161,130	\$77,451
1911.....		20,088	58,846
Percentage.....		79.742	18,605

Apiculture has become an important industry of the country. A fine grade of honey is produced which finds a ready market at remunerative prices. As in former years, Dominican honey found its best market in Germany. The portion shipped to the United States was 33,838 gallons.

COCONUTS.

The coconut industry revived somewhat during the year after several off seasons in which the trees were affected by a disease. More of this fruit was brought to market and the prices obtained were regular and steady. Exports of 650,580 kilos, valued at \$12,535,

contrasted favorably with similar transactions, 534,993 kilos, value \$11,681, for the year immediately before. Shipments were made to three countries, United States, Germany, and France. A development of considerable consequence, and one which furnishes an impetus to the cultivation of coconuts, was the erection of a large factory at Samana, the center of the principal coconut-producing district. The enterprise consists of modern milling machinery for extracting the oil and has a capacity for grinding the entire present crop. From now on the local demand will furnish a reliable home market, which in addition to foreign shipments should stimulate the cultivation and cause a decided increase in the annual production.

MOLASSES.

During 1912, molasses weight 8,861,441 kilos, value \$49,824 was exported, and nearly all of it went to the United States. A large part of these sirups, which can not be reduced to sugar, are used locally in the manufacture of rum and alcohol.

In the foregoing paragraphs have been discussed the articles of chief value among the exports. There were others of minor nature, but regular factors in the trade, to which brief reference is made in the following:

Animals (live stock), value \$60 035, representing stock on the hoof driven across the border to the neighboring Republic, Haiti. Raw materials for chemicals, drugs, and dyes, worth \$49,401. Mahogany, \$11,738; *lignum vitæ*, \$63,142, and other woods \$51,531.

All other exports. Under this general heading were grouped several classes of products, including molasses (already mentioned), value \$49 824; tanned hides, \$12 979; seeds (chiefly cotton), \$11,868, etc. All of the items carried a total valuation of \$110 870, a loss of \$14,286, compared with similar shipments in 1911.

Imports

Iron and steel, manufactures of	
1912	\$1,626,800
1911	998,010
Increase,	628,790

The very remarkable increase in iron and steel and their manufactures was in the main part due to increased importations of machinery, mostly sugar machinery. Nearly all the sugar estates either installed new machinery or made extensions and improvements to their mills. More than half a million dollars' worth of sugar machinery alone was imported. Besides the value of the large assortment of articles in this classification, other developments, among which figured three electric-light plants and a shoe factory, helped to swell the total valuation indicated above, which was almost 20

per cent of all imports. The following are a few of the most important items of iron and steel manufactures received:

	Kilos.	Value.
Machinery.....		\$863,977
Galvanized roofing.....	1,142,525	79,953
Barbed wire.....	1,378,180	53,000
Steel rails.....	965,535	33,969

Nearly 83 per cent of the total was purchased in the United States. Practically the entire remainder was supplied by England and Germany.

Cotton, manufactures of:

1912.....	\$1,608,465
1911.....	1,616,921
Decrease.....	8,456

A small decline for imports of cotton manufactures was noted. The principal items under this group are cotton cloths, wearing apparel, and thread, of which 16,389,980 meters of cotton textiles, worth \$1,176,034, and 62,022 kilos of thread, worth \$92,142, were imported. The United States furnished \$859,456, the United Kingdom \$474,733, Germany \$135,135, Spain \$54,657. France and Italy supplied nearly equal quantities.

Rice.	Kilos.	Value.
1912.....	12,109,110	\$772,982
1911.....	10,969,881	540,204
Increase.....	1,139,229	232,778

Germany continued to furnish nearly all the rice, and increased its sales. Rice is the staple diet of the people, and the statistics indicate that the demand is for larger quantities each year. But this foodstuff must come from without, although a small amount of rice is grown on the uplands in remote sections of the country. Enough is demonstrated to establish the fact that the soil and climate of the Dominican Republic are well adapted to this cultivation, and it is among the possibilities of the future that this cereal will be extensively grown on the now idle but fertile lands, thus obviating the necessity of sending much money out of the country annually to purchase an article that can be produced in the Republic.

Wheat flour.	Kilos.	Value.
1912.....	7,260,383	\$453,177
1911.....	6,785,010	406,536
Increase.....	475,373	46,641

American flour continues to supply practically all the demand in this line, and the much larger receipts show that the use of flour has been extended.

Provisions, comprising meat and dairy products:

1912.....	\$420,978
1911.....	415,346
Increase.....	5,632

The United States sold more than half the meat and dairy products imported during the year. Other countries participating in this trade to any extent were Germany, Holland, and Denmark. Listed herewith are some of the more important items of this schedule. The weights given furnish a dependable guide to the annual consumption of each class.

	Kilos.	Value.
Coffee.....	360,248	\$118,405
Butter.....	445,189	108,869
Bacon.....	96,001	28,729
Sugar.....	83,752	31,805
Honey.....	80,099	31,304
Foreign lard.....	63,417	22,068
Salt meats.....	148,397	18,678
Canned fruit.....	63,333	15,890
Canned fruit.....	81,960	15,819

Wood, and manufactures of:

1912.....	\$343,429
1911.....	256,369
Increase.....	87,060

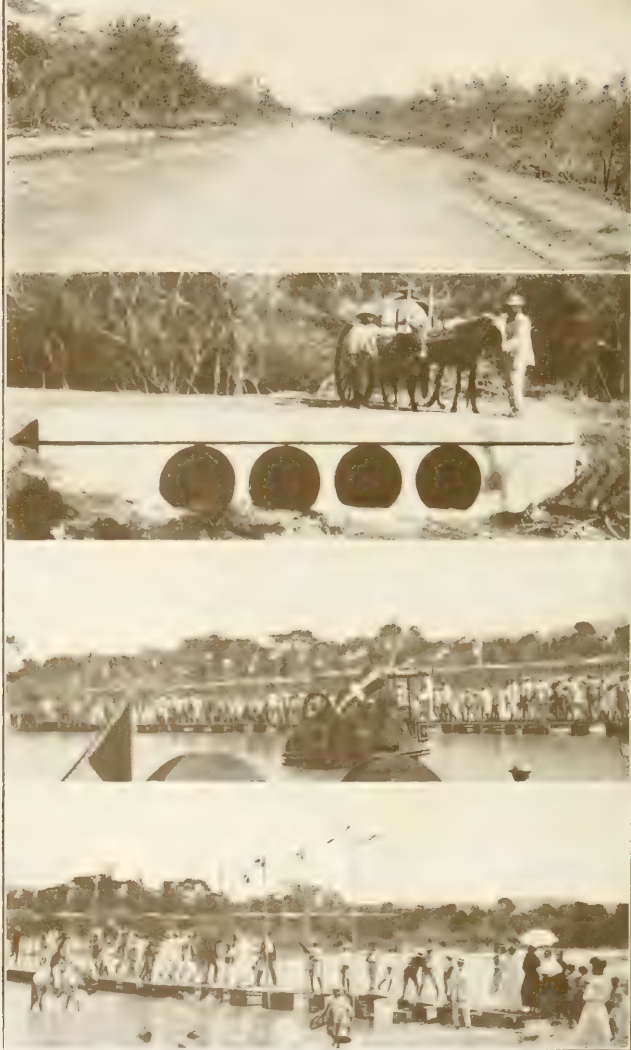
Previous annual gains were continued, owing to the increasing demand for building materials. The United States supplied 88 per cent of wood and its manufactures, of which were 16,072 cubic meters of lumber, valued at \$202,879. Approximately \$50,000 worth of furniture was the next important item of this group. German sales aggregated \$29,352.

Oils:

1912.....	\$412,070
1911.....	320,867
Decrease.....	8,797

With a total valuation of \$277,064, it will be seen that nearly all of the oils were of American origin. Olive oils, cost, \$16,313, came from Spain. The following are the leading classes of oils imported during the year:

	Kilos.	Value.
Coal oil.....	99,777	\$14,445
Coal oil.....	2,776,551	93,428
Lubricating oils.....	297,387	23,892
Gasoline.....	423,234	17,722



REMARKABLE ACTIVITY OF THE DEPARTMENT OF FOMENTO PROMOTION OF THE DOMINICAN REPUBLIC.

The top picture shows section of road built constructed from Azua to San Juan, 41.64 miles, which will be extended to the Haitian frontier. This solid type of road is being built at various points. The next view illustrates the modern concrete bridges built along the road. The lower views were taken at the inauguration of work on the new public road from La Vega to Moca and thence to Santiago, a distance of 25 miles. The crowds are crossing the temporary bridges on the Camú River. In the foreground appears the road roller used in construction work.

Vegetable fibers, manufactures of:

1912.....	\$29,240
1911.....	229,180
Increase.....	7,070

The United States supplied nearly half of the manufactures of vegetable fibers, with Germany second and England third. Empty sacks for the exportation of sugar, cacao, and coffee, weight 1,223,784 kilos, value \$162,470, were the most important items.

Leather, manufactures of:

1912.....	\$201,312
1911.....	237,076
Decrease.....	35,764

About 84 per cent of leather and its manufactures was purchased in the United States. Germany held second place and England third. 87,666 pairs of shoes, worth \$87,280, were of American origin. This is a falling off of 11,477 pairs, as compared with the importations of the previous year, explained by the fact that shoes of local manufacture are now sold in increased quantities. Importations of tanned hides amounted to 27,078 kilos, value \$76,282.

Fish and fish products:

1912.....	\$189,864
1911.....	193,911
Decrease.....	4,047

These products, carrying a value of \$173,950, were purchased in the United States. The only other countries that figured as competitors, even in a small way, were Germany and Spain. The principal items of this class were:

	Kilos.	Value.
Crabs.....	1,000	\$4,000
Crabs, bottling.....	7,000	14,000
Sardines.....	54,145	13,296
Herring, salted.....	1,000	10,000
Squid.....	1,000	10,000

Chemicals, drugs, and dyes:

1912.....	\$165,843
1911.....	157,797
Increase.....	8,046

The United States furnished more than 66 per cent of the chemicals, drugs, and dyes, while France was second with \$34,063, and Germany third with \$11,653.

Vehicles and boats:

1912.....	\$154,403
1911.....	109,878
Increase.....	44,525

Several motor craft were imported for service at the ports, most of them being purchased in the United States, and in addition two American steam yachts, tonnage 307 and 202, respectively, were brought in and registered under the Dominican flag, for the coast-wise trade, where they are now profitably employed. Their operation has provided shipping facilities very much needed.

The importation of automobiles continues, all of them from the United States; and with the extension of good roads, some of which are now under active construction, the demand will increase.

Agricultural implements:

1912.....	\$139,352
1911.....	54,469
Increase.....	84,883

A notable increase in importation of implements necessary for the agricultural development of the country is a favorable sign, and is indicative of larger exportations in the future. The larger part of these supplies came from the United States, while German makes were second in importance and English were third.

Sugar and confectionery:

1912.....	\$128,260
1911.....	96,292
Increase.....	31,968

Most of the sugar and confectionery came from the United States. Purchases of English candy were valued at \$5,607. Refined sugar alone, from American refineries, weighed 996,342 kilos, value \$83,379.

	Beer.	Liters.	Value.
1912.....		544,220	\$107,001
1911.....		458,844	87,901
Increase...		85,376	19,100

Beer consumption in the Dominican Republic is confined almost exclusively to the German product, though American sales showed some gain.

Paper, and manufactures of:

1912.....	\$105,152
1911.....	80,025
Increase.....	25,127

Germany and the United States furnished nearly all the paper and its manufactures. The former country was in the lead, with sales aggregating \$47,652, against \$43,092 for the American article.



REGRAIDING ON THE PUERTO PLATA-SANTIAGO BRANCH OF THE DOMINICAN CENTRAL RAILWAY.

The railway, which is now being completed for a private limited stock company, is the property of the Dominican Government. It extends a distance of 47 miles from Puerto Plata to Santiago, with an extension of 13 miles to Moca. Where it passes through broken and mountainous lands there is a stretch of 17 miles of rack road. As the maintenance and operation of this kind of railroading is very expensive, the Government is now working on a deviation of the line from the base of San Marco Hill to Bajabonico, thus obviating the necessity of using the rack system.

As import embraces a wide range, no attempt has been made in the preceding paragraphs to discuss, even briefly, the transactions of a lesser degree.

Dealing particularly with the 10 principal statistical groups, in the order of their importance, the table inserted herewith gives a recapitulation compared with 1911. Values are stated, percentage of the total trade, and the percentage of gains and losses for the year for which it is prepared.

Articles	1911		1912		Percent- age of in- crease (+) or decrease -
	Value.	Percent- age of total value.	Value.	Percent- age of total value.	
Iron and steel, and manufactures of	\$988,010	14.36	\$1,626,800	19.80	+94
Cotton, manufactures of	1,616,921	23.27	1,098,465	19.57	-1
Rice	540,204	7.77	772,982	9.40	+43
Wheat flour	406,536	5.85	453,177	5.52	+11
Provisions, meat and dairy products	415,346	5.98	420,978	5.12	+1
Wool, and manufactures of	256,369	3.69	343,429	4.18	+41
Oils	20,865	4.02	312,070	3.80	-
Fibers, vegetable, manufactures of	229,180	3.29	236,250	2.87	-
Leather, and manufactures of	237,076	3.41	201,312	2.45	-15
Fruit and fish product	193,911	2.79	189,864	2.31	-2
All other imports	1,735,242	24.97	2,052,571	24.98	+18
Total	6,949,662	100.00	8,217,898	100.00	

VESSELS IN THE CARRYING TRADE.

By rearrangement of the system for compiling the receivership statistics of foreign commerce, value of cargoes according to nationality of vessels engaged is not available, as published in previous summaries. As the same steamship lines continue well established in the trade, the volume of freight under the different flags relatively was more or less as in former years. Named in the order of importance, American, Norwegian, German, French, British, Spanish, Dutch, Dominican, and Cuban vessels visited Dominican ports with cargoes and carried products away. American vessels were mostly employed for the transportation of imports, and the same statement is true of exports, although Norwegian vessels engaged in the latter branch made gains and are chartered in larger numbers each year for the export of sugar.



PAN AMERICAN NOTES

PRESIDENT WILSON AND LATIN AMERICA.

In view of the widespread interest in the declaration which President Wilson, of the United States, made in regard to his policy toward Latin America, and to comply with the numerous requests that have come to the Pan American Union, there is given below the wording of that declaration, as sent out by the Secretary of State of the United States to its diplomatic officers in Latin America:

In view of questions which are naturally uppermost in the public mind just now, the President issued the following statement:

"One of the chief objects of my administration will be to cultivate the friendship and deserve the confidence of our sister republics of Central and South America, and to promote in every proper and honorable way the interests which are common to the peoples of the two continents. I earnestly desire the most cordial understanding and cooperation between the peoples and leaders of America and, therefore, deem it my duty to make this brief statement.

"Cooperation is possible only when supported at every turn by the orderly processes of just government based upon law, not upon arbitrary or irregular force. We hold, as I am sure all thoughtful leaders of republican government everywhere hold, that just government rests always upon the consent of the governed, and that there can be no freedom without order based upon law and upon the public conscience and approval. We shall look to make these principles the basis of mutual intercourse, respect, and helpfulness between our sister republics and ourselves. We shall lend our influence of every kind to the realization of these principles in fact and practice, knowing that disorder, personal intrigues, and defiance of constitutional rights weaken and discredit government and injure none so much as the people who are unfortunate enough to have their common life and their common affairs so tainted and disturbed. We can have no sympathy with those who seek to seize the power of government to advance their own personal interests or ambition. We are the friends of peace, but we know that there can be no lasting or stable peace in such circumstances. As friends, therefore, we shall prefer those who act in the interest of peace and honor, who protect private rights, and respect the restraints of constitutional provision. Mutual respect seems to us the indispensable foundation of friendship between states, as between individuals.

"The United States has nothing to seek in Central and South America except the lasting interests of the peoples of the two continents, the security of governments intended for the people and for

no special group or interest, and the development of personal and trade relationships between the two continents which shall redound to the profit and advantage of both and interfere with the rights and liberties of neither.

"From these principles may be read so much of the future policy of this Government as it is necessary now to forecast, and in the spirit of these principles I may, I hope, be permitted with as much confidence as earnestness to extend to the governments of all the Republics of America the hand of genuine disinterested friendship, and to pledge my own honor and the honor of my colleagues to every enterprise of peace and amity that a fortunate future may disclose."

DEMISE OF PRESIDENT BONILLA.

Gen. Manuel Bonilla, who was inaugurated President of Honduras February 1, 1912, died unexpectedly at Tegucigalpa on March 21, 1913. While his health had been failing for some time, no one thought that the end would come so soon. Gen. Bonilla had a long and active political and military career, having been twice President of Honduras. His demise has been deeply felt by his many friends. The Pan American Union, as a token of respect to President Bonilla's memory, displayed at half-mast the Honduran flag and the ensign of the Pan American Union from the time it was known here that the President had passed away until after the funeral. Dr. Francisco Bertrand, Vice President of Honduras, immediately succeeded to the Presidency after the death of Gen. Bonilla. This is not Dr. Bertrand's first experience as chief executive of the nation, as he has already served as Provisional President for one year, until succeeded by the late Gen. Bonilla.

VISIT OF DR. MÜLLER TO THE UNITED STATES.

The news that Dr. Lauro Müller, the eminent Minister of Foreign Affairs of the United States of Brazil, is to visit the United States has been greeted with much satisfaction. It is understood that the brilliant statesman and diplomatist who has won such a remarkable place in the esteem of his fellow countrymen as well as in the foreign offices of the different countries of the world will come to Washington to reciprocate the courtesy of the trip made by Mr. Root as Secretary of State in 1906. The traditional bonds of friendship which have so long existed between this country and Brazil and which have brought these two countries into a unique position of commercial intercourse can not but be materially strengthened and further cemented by this visit. Brazil should be congratulated on its happy selection of a man of such sterling qualities, while the United States deeply feels the delicate compliment paid to it in the

honorable mission of Dr. Müller. While this visit is looked upon with much favor by all in the United States who are interested in developing a closer solidarity between the nations of the Western Hemisphere, it is especially gratifying to note that corresponding sentiments are voiced by the press of the guest nation. In both of these countries there is clearly apparent a genuine desire to continue actively the work of developing the closest ties of intellectual and social intercourse—a mission brilliantly started by the late Ambassador Nabuco and former Secretary of State Elihu Root, and so competently continued by their able and notable successors in office. It is regretted that lack of space makes it impossible to quote from the many favorable comments which have appeared in the prominent periodicals of Brazil anent the visit of Dr. Müller. In all of them, however, there is manifest a true friendly spirit and an appreciation of the significance of this mission of friendship, while the lofty tributes paid to the qualities and labors of such brilliant statesmen and diplomatists as the late Baron do Rio Branco and Ambassador Nabuco, Dr. Müller, and Secretary Root, are fitting, deserving, and highly gratifying.

PAN AMERICA IN FRANCE.

It is interesting and especially pleasing to note that the effort to develop closer relations between the American Republics of the Western Hemisphere is not restricted by the boundaries of these 21 independent Republics, but is manifest wherever there is a group of representative citizens from these countries. Better understanding and more intimate association are the dominant keynotes of gatherings of such groups and the luncheon which the Hon. Myron T. Herrick, the United States Ambassador at Paris, tendered to his American diplomatic colleagues in France, in celebration of Washington's birthday, proved no exception. Following a custom established by his predecessors, Ambassador Herrick entertained on this notable occasion the diplomatic representatives of the countries embraced in the Pan American Union. In another section of the Bulletin there is published a more detailed report of this Pan American gathering and quotations from the remarkable speeches delivered on that occasion.

BIRTHDAY FELICITATIONS TO AMBASSADOR MORGAN.

Hon. Edwin V. Morgan, the United States ambassador to Brazil, has certainly won a place of unusual distinction in the official and social life of that remarkable country. Although he has been accredited to his post in Rio de Janeiro a little over a year, he has, nevertheless, signally succeeded during that short space of time in

winning the cordial esteem and deep affections of the people of Brazil. On the occasion of Mr. Morgan's birthday on the 22d of February the leading newspapers of the country united in offering sincere expressions of felicitations to him and in paying handsome compliments to his ability and personality. Mr. Morgan also received the good wishes of high officials of the Brazilian Government and of his diplomatic colleagues at Rio.

ANNUAL PAN AMERICAN SOCIETY DINNER.

The Pan American Society of the United States will give its second annual dinner at the Waldorf Astoria, New York, Thursday evening, May 15, at 7 o'clock. The chief guests of honor will be the Secretary of State of the United States and the Latin American members of the Diplomatic Corps in Washington, who constitute the governing board of the Pan American Union. Acceptances to attend the banquet have already been received from over 500 representative business and professional men of New York and other cities, and especially men interested in the development of closer relations between the United States and its sister Republics. Hon. Henry White, president of the society and formerly ambassador of the United States to France and chairman of the United States delegation to the Fourth Pan American Conference in Buenos Aires, will preside and act as toastmaster. The principal addresses, aside from his, are to be delivered by the Secretary of State and the Brazilian ambassador. As this issue of the Bulletin goes to press too early to include more details about the dinner, they will be given in a later issue. The subcommittee on arrangements are the following: Ramon Guiteras, Archer M. Huntington, W. Fellowes Morgan, James M. Motley, and Cabot Ward. With them Frederic Brown, the secretary and treasurer, is cooperating in looking after some of the details of preparation. The general dinner committee includes the following: Robert Bacon, Nicholas Murray Butler, Frederic R. Coudert, John D. Crimmins, Thomas A. Eddy, James W. Gerard, J. P. Grace, Lloyd C. Griscom, Ramon Guiteras, Archer M. Huntington, Otto H. Kahn, C. Minor Keith, Seth Low, John Bassett Moore, W. Fellowes Morgan, Henry Morgenthau, James M. Motley, Lewis Nixon, Charles D. Norton, George Foster Peabody, Charles M. Schwab, Albert Shaw, Charles H. Sherrill, R. A. C. Smith, James Speyer, Frank A. Vanderlip, and Cabot Ward.

INTERNATIONAL SOUTH AMERICAN POSTAL BUREAU.

The Pan American Union extends its compliments to the International South American Postal Bureau and its director, Sr. Don César Y. Rossif, and takes advantage of this opportunity to express



Enrique Borja, M. D.

DR. ENRIQUE BORJA

Dr. Enrique Borja, who has spent a great deal of time in the United States, was recently appointed by the Government to be chief of the important mission of Guatemala. During his stay in Washington Dr. Borja made many friends who wish him success in his new and more responsible duties.

its sincere appreciation for the kind offer of its services to this institution. The Postal Bureau has been established at Montevideo, by the Government of Uruguay, in accordance with authority conferred upon it by the South American Postal Congress, which met in that city January 8-February 2, 1911. In a communication from the director, Sr. Rossif, he states that the following Governments have ratified their adherence to this postal bureau: Argentina, Bolivia, Colombia, Chile, Ecuador, Paraguay, Peru, and Uruguay, while that of Brazil is expected at any time. The postal bureau, which is in direct communication with all the countries of the South American Postal Union, will doubtless prove an important factor in promoting peace and friendship among the neighboring countries and in advancing the spirit of Pan Americanism.

BRAZILIAN STUDENT SOCIETY IN THE UNITED STATES.

On June 9, 1913, there will be held at Buffalo, New York, the first meeting of a group of Brazilian young men studying in the United States for the purpose of formally organizing a student society. This commendable endeavor is in line with the growing student movement everywhere evident to unite under common bonds students from the same country in order to spread accurate knowledge and information about their nation in the United States, as well as to disseminate similar facts about the United States in their native lands. Such organizations have materially assisted in promoting the social and educational interests of the countries concerned and have received the aid and support of leading educators and statesmen both of their own country and of the United States. The first impetus to the organization of this particular society was given at the annual convention of the Cosmopolitan Clubs of the United States recently held at Philadelphia, Pennsylvania. There the purposes of the Brazilian student society were discussed and an organization committee appointed, consisting of H. Oswaldo de Miranda, University of Pennsylvania; J. P. de Barros Monteiro, University of Illinois; V. S. de Barros, jr., Syracuse University; and A. C. de Paula Souza, Cornell University. The organization has the support of such splendid leaders as Dr. Eugenio Dahne, who represents the Brazilian Ministry of Agriculture in the United States; Dr. Garcia Leão, the vice consul of Brazil in New York; Prof. J. C. Branner, vice president of Stanford University; and through Dr. Dahne it is expected that the encouragement and aid of Dr. Pedro Toledo, the Minister of Agriculture of Brazil, will be obtained. The Pan American Union extends its best wishes to the Brazilian Student Society for the happy realization of its aims and purposes and will be pleased to cooperate with it in every consistent manner possible.

PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

It is gratifying to note that there is growing interest throughout all Latin America in the Panama-Pacific Exposition which will be held in San Francisco in 1915. The Pan American Union has done everything it can, consistent with its scope, to make known the purpose and plan of this exposition to the countries of Latin America and to answer satisfactorily the host of inquiries which come to it from them. There is no doubt that there will be no more important exhibits at the exposition than those from the 20 countries lying south of the United States, and especially those bordering on the Pacific Ocean and directly affected by the opening of the Panama Canal.

The great majority of persons attending the exposition and who are interested in foreign countries, foreign products and trade will wish to inspect thoroughly the buildings and exhibits of the Republics of Central and South America. The news which comes to this office from San Francisco itself indicates that the preparatory work of the exposition is going forward successfully and favorably and that when it opens it will surpass all other expositions in the history of the world. The president of the exposition is Mr. Charles C. Moore, one of the most respected men of the Pacific coast. The director in chief is Dr. Frederick J. V. Skiff, who is admittedly the greatest living expert on expositions. Capt. A. C. Baker, director of the division of exhibits; George Hough Perry, director of the division of exploitation; Harris D. H. Connick, director of the division of works; Frank Burt, director of the division of concessions and admissions; Theodore Hardee, chief of the department of liberal arts; and Joseph M. Cumming, secretary to the president, are all men whose abilities are recognized. The board of directors is made up of men of the highest standing and greatest influence in the business and professional life of San Francisco. In view of the importance of this board their names are given below:

John Barneson, M. J. Brandenstein, John A. Britton, Frank L. Brown, W. W. Chapin, P. T. Clay, William H. Crocker, R. A. Crothers, M. H. de Young, Charles de Young, A. I. Esberg, Charles S. Fee, H. F. Fortmann, A. W. Foster, Reuben Brooks Hale, I. W. Hellman, jr., S. Fred. Hogue, Homer S. King, Curtis H. Lindley, P. H. McCarthy, James McNab, Charles C. Moore, Thornwell Mullally, James Rolph, jr., A. W. Scott, jr., Henry T. Scott, Leon Sloss, C. S. Stanton, Rudolph J. Taussig, Joseph S. Tobin.

REPORT OF GENERAL RECEIVER WILLIAM E. PULLIAM.

Elsewhere in this issue of the BULLETIN is published a summary of the report of Hon. William E. Pulliam, general receiver of Dominican customs under the American Dominican Convention of 1907. This report contains a description of the foreign commerce and trade of the Dominican Republic for 1912 and tables showing comparison with the

figures of 1911. As in the case of all of Mr. Pulliam's reports, this one is both interesting and instructive and should be read by all those who wish to be more familiar with the details of the commerce of that remarkable, resourceful country bordering on the Caribbean Sea and not remote from the coast of the United States. It is a source of regret that there is not space in the BULLETIN to publish the report in full.

THE INTERNATIONAL RIFLE MATCHES.

It is highly gratifying to note the interest that is being manifested in all quarters in the international rifle matches which will be held at Camp Perry, State of Ohio, during the month of September, 1913, in connection with the Perry Victory Centennial Celebration. This gathering will afford a splendid opportunity for the marksmen not only of the United States and Latin America, but of Europe as well, to test their dexterity and skill as expert riflemen. The pleasant recollections of the enjoyable tournament held under the auspices of the Tiro Federal Argentina (Argentine National Shooting Association) at Buenos Aires last year are stimulating the committee in charge to provide every facility and comfort for the pleasure of the contestants from Latin America and Europe who will participate in this exhibition. In regard to the prizes offered and the large number of countries which have already indicated their intention of sending representatives, the BULLETIN is pleased to quote from a recent issue of the Army and Navy Journal, which states, in part:

At a meeting of the executive committee of the National Rifle Association of America held December 6, 1912, Col. H. G. Catrow, of the Third Infantry Regiment of the State of Ohio, was appointed commissioner general for the international matches. * * *

A program of the matches was approved, covering not only the official matches of the International Union, composed of European nations and the Pan American Union, organized by the Republics of the Western Hemisphere, but additional matches open to the world, which includes the famous "Palma" trophy and a new Pan American match for a two-men team. The trophy for this match has been presented by Hon. John Work Garrett, United States minister to the Argentine Republic. There will be besides this another trophy voted by the National Guard Association of the United States at its late convention in Norfolk. This trophy will represent the long-range individual military championship of the world, calling for 15 shots at 800, 900, and 1,000 yards (732, 823, and 915 meters). The prizes will amount in all to about \$20,000 for the international matches alone.

Assurances have already been received from Germany, France, Italy, Sweden, Switzerland, Argentina, Canada, Brazil, Chile, Peru, and Uruguay that they will send delegations to the United States for the shoot. It is expected that about 22 nations will be represented.

In this connection it has been announced that the trophy presented by Hon. John W. Garrett for the Pan American match will be offered only to a visiting team.



TO CLARETTE FROM BOSTON OF THE BOSTON CHAMBER OF COMMERCE PARADE ON THEIR SOUTH AMERICAN TOUR, THURSDAY, APRIL 24, 1908.

The Remances, Nephews of the Argentine Minister at Washington, Mayor John F. Fitzgerald of Boston, and Mr. James J. Shannon, President of the Boston Chamber of Commerce, had received a letter from the Argentine Minister, Mr. Juan Manuel de Rosas, asking them to bring him back to the United States, and from the Argentine Minister, Mr. Juan Manuel de Rosas, asking them to bring him back to the United States, and from the Argentine Minister, Mr. Juan Manuel de Rosas, asking them to bring him back to the United States.



Photographs by Nettrait, Boston.

THE UNITED FRUIT COMPANY'S STEAMER *METAPAN* WHICH WILL CARRY
THE PARTY TO PANAMA EN ROUTE TO SOUTH AMERICA.

With the shrill whistles of many ships in the harbor sounding loudly and the thousands of people who had gathered to witness the departure cheering enthusiastically, the steamer *Metapan* dropped her mooring and glided down the harbor with the notable party aboard. The upper illustration shows the members of the party facing toward the wharf. The lower illustration shows the *Metapan* some distance out in the harbor.

PANAMA INTERNATIONAL COMMISSION.

The Joint International Commission, appointed by the President of the United States and the President of the Republic of Panama, organized on the morning of Saturday, March 1, 1913, in the offices of the Administration Building of the Isthmian Canal Commission. Dr. L. S. Rowe was elected chairman, and the commission immediately preceded to the work of organization. Dr. Porras, the President of the Republic of Panama, placed the National Palace at the disposal of the commission for the conduct of its hearings. The public hearings of the commission were opened on the morning of Monday, March 17, 1913.

DR. M. DE MOREIRA, PRESIDENT OF AMERICAN MANUFACTURERS EXPORT ASSOCIATION.

It is a matter of particular interest that Dr. M. de Moreira, first vice president of the American Manufacturers' Export Association, has been elected president in place of Hon. William C. Redfield, who has been appointed Secretary of Commerce in the Cabinet of President Wilson. Dr. de Moreira has long played an important part in the commercial relations of North and South America and is regarded as a recognized authority on all matters affecting Pan American commerce and trade. He is manager of the foreign department of Messrs. John Boyle & Co., Inc., 112 Duane Street, New York City, manufacturers of cotton duck, and he has been associated with many other important commercial and editorial enterprises. We wish him success in his new responsibility.

AMERICAN PEACE CONGRESS.

Great preparations are being made for the Fourth National American Peace Congress, which will meet in St. Louis, Missouri, May 1, 2, and 3. President Woodrow Wilson has consented to serve as honorary president and expressed the hope that he may be able to attend. Former President Taft and Hon. Elihu Root, Senator from New York, have consented to the use of their names as honorary vice presidents. It is expected that Secretary of State Bryan and his predecessor, Hon. Philander C. Knox, who have accepted invitations, will be present and make addresses. According to the announcement the following Latin American diplomats have accepted the invitation to attend and participate in the congress: Minister Calvo of Costa Rica, Minister Calderon of Bolivia, Minister Rojas of Venezuela, Minister Castillo of Nicaragua, Minister Martin Rivero of Cuba, Minister Nyon of Argentina, Minister Marín de

Pena of Uruguay, Minister Méndez of Guatemala, Minister Peynado of the Dominican Republic, Minister Pezet of Peru, and Minister Valdes of Panama. The Brazilian ambassador expected to sail for Europe in April, but some other representative of Brazil is expected to be present. At this writing definite word had not been received from the ministers of Salvador, Chile, Colombia, and Honduras, and from the chargé d'affaires of Mexico, but it was hoped, according to the bulletin of the congress, that they would also accept. Representative Richard Bartholdt, Member of Congress from the city of St. Louis, has had particular charge of arrangements. Director General John Barrett will represent the office of the Pan American Union at this conference.

VISIT OF NOTED WOMAN AUTHOR.

There has recently been visiting in the United States Mrs. Alec Tweedie, an Englishwoman, and a writer of unusual ability and talent. Her works have been so intensely interesting that they have found their way into other languages. Her latest work on Mexico, which was published under the title of "Mexico As I Saw It," met with the same favorable reception as her previous effort, and has sold in tens of thousands. The last book to come from the facile pen of this versatile writer is entitled "Thirteen Years of a Busy Woman's Life," and it has already run into a fourth edition within nine weeks of publication. Mrs. Tweedie is now on her way to Argentina, and if she undertakes to record her impressions of that remarkable country in the same illuminating manner as she has of Mexico, there is no question but that we shall have a book of absorbing interest and of great value.

TOUR OF BUREAU OF UNIVERSITY TRAVEL.

The Bureau of University Travel, whose headquarters are Trinity Place, Boston, Mass., has issued an interesting circular entitled "South America and Panama, 1913," describing a summer vacation tour from July 5 to September 29, which includes a visit to Cuba, Jamaica, Panama, Peru and Bolivia, Chile, Argentina, Uruguay, Brazil, and the West Indies. The party will sail from New York City on Saturday, July 5, on the steamship *Trent* of the Royal Mail Steam Packet Co. Proceeding first to Panama via Cuba and Jamaica, the party will be taken down the west coast of South America, then across from Chile to Argentina, then to Uruguay and Brazil, and back to New York via the West Indies, arriving in the United States Monday, September 29. The best season of the year has been selected for this tour because south of the Equator the seasons are reversed from



MEMBERS OF THE BOSTON CHAMBER OF COMMERCE PARTY WITH WILLIAMS AT THE HOTEL AMERICA

The Boston Chamber of Commerce, which has been one of the most active and influential of the city's business organizations, has been one of the most active and influential of the city's business organizations. The chamber has been one of the most active and influential of the city's business organizations. The chamber has been one of the most active and influential of the city's business organizations.

those north of it, and the travelers, therefore, will escape the heat of the United States in the summer and visit the countries of South America in the cooler and more agreeable months. This tour of the Bureau of University Travel is another illustration of the increasing travel to the Latin American countries.

LATIN AMERICA AT THE UNIVERSITY OF WISCONSIN.

Special credit is due the University of Wisconsin for the organization which it has developed under the name of "The Spanish American Club of the University of Wisconsin." Its purpose is to promote the study of the Spanish language and literature and the life, manner, and customs of Spain and Spanish American countries. During the year the club meets twice each month and listens to lectures by persons competent to deliver addresses upon the subjects which come before the club. It is planning to carry out something more elaborate during the coming year, not only for the purpose of giving greater impulse to the study of Spanish, but also to give the students of the university a more intimate and intelligent insight into the relations of the United States with Latin American countries. Prof. Paul G. Miller, of the department of romance languages, informs the director general that it has been customary for some distinguished French professor to lecture there every year under the auspices of the Alliance Française, and that those in the university who are interested in the welfare and promotion of a knowledge of the Spanish language and literature are of the opinion that a similar plan should be carried out with reference to Spanish. There will be, however, he says, a difference, in that the appeal to the students of the university will be made not only from the standpoint of the Spanish language, but also from that of the commercial, political, and amicable relations of the United States and Spanish American sister Republics. Cooperating with the department of romance languages in carrying out this program will be the school of commerce and the department of political science. There are 1,400 students and 20 instructors of various grades in the department of romance languages. Two of these instructors devote their whole time to Spanish and one gives one-half time. Among the professors of the university who are particularly interested, aside from Prof. Miller, are Dr. Paul S. Reinsch, late exchange professor at the University of Berlin, who was also the delegate of the United States to the last Pan American Conference at Buenos Aires; Prof. E. A. Ross, whose interests lie chiefly in sociology; Prof. H. L. Smith, of the law school; Prof. H. A. Smith, chairman of the department of romance languages; Prof. S. A. Gilman, of the school of commerce; and Prof. W. A. Scott, director of that school.

PAN AMERICAN LECTURES IN CUBA.

The Pan American Union has just received a communication from Blanche Zacharie Baralt, Ph. D., announcing a course of lectures in English on the political and social development of Latin America, at her residence in Habana, on Thursday afternoons of March, April, and May. Her subjects include the following: Character of the Conquest of Spanish America: The Colonization: The Independence: The Congress of Panama and the Political Unity of America: The Rise of New States: Political Life in Spanish America: Brazil: Commercial, Industrial, and Intellectual Conditions. Mrs Baralt is to be congratulated on the work she is doing to help along the great educational movement which spreads useful and interesting information about the history, characteristics, and progress of the American countries.

HANDBOOK ON THE PANAMA CANAL.

The correspondence of the Pan American Union has been filled with letters from all parts of the world asking for copies of its handbook on the Panama Canal. Orders have poured in not only from book dealers, but from libraries, travelers, and students who wish to have in concise, practical, and useful form complete data concerning the canal and what it means. So great has been the demand for this handbook that it has been necessary to order an extra edition. If any readers of the BULLETIN have not yet secured a copy and desire to have one as a matter of reference and information, it is advisable that they should order it as soon as possible, because the new edition will soon be exhausted and a third edition will probably not be published until after the canal has been completed. It is sold at exactly the cost price, \$1 per copy.

NEW STEAMER ON THE LAMPORT & HOLT LINE.

Busk & Daniels, the general agents of the Lamport & Holt Steamship Line, running vessels from New York City to Rio de Janeiro, Montevideo, and Buenos Aires, are to be congratulated upon their latest announcement to the effect that their new twin-screw steamer *Vandalghe*, 12,000 tons, a sister ship of the steamship *Vestris*, will be permanently placed on the passenger and mail service between New York, Brazil, and Argentine ports, sailing from New York for the first time April 19. In view of the new vessels which the Lamport & Holt Line is placing on the South American run the general statement which has been made for such a long time that there are poor passenger steamship accommodations for the direct trip from New York to South America must be corrected. The passenger traffic

between the United States and South America is growing so rapidly that these improvements are sure to be appreciated. The number of letters received by the Pan American Union asking about the trip to South America is constantly increasing and is evidence of a new tendency of American travelers, as well as business men, to go to South America for a change or to study new opportunities instead of going to Europe or to the Orient.

PANAMA CANAL CONFERENCE.

One of the most important announcements which has recently come to the attention of the Pan American Union is that of the



OFFICERS OF THE CUBAN TRAINING SHIP "PATRIA" ENTERTAINED AT DINNER GIVEN BY THE UNITED STATES AMBASSADOR AT RIO DE JANEIRO MARCH 1, 1913.

This thoroughly enjoyable dinner, with Ambassador Morgan as host, was held at the Club Central, in the Brazilian capital. Among those present were Commandant Juan Perearnan, Second Commandant Cecilio Martinez; Capt. Manuel Lusilla; Lieuts. Medico Rafael Menendez, Octavio Martinez, and Carlos Sanz; and Cadets F. Ardois and Francisco G. Proigas; also the chargé d'affaires of Cuba at Rio, Sr. Mario Diaz y Cruz, Rear Admiral Adelino Martins, Rear Admiral Baptista Franco, Commandant Marques de Azevedo, Capt. Antonio Jose da Fonseca, Lieut. Mario Clementino de Carvalho, of the Brazilian Navy, and the members of the United States embassy staff.

Western Economic Society, which has headquarters at Fifty-eighth Street and Ellis Avenue, Chicago, regarding its sixth conference, which will be held in May and devoted entirely to the consideration of the problems and questions of the Panama Canal. A tentative statement of topics which will be discussed by experts at this conference include the following: The Canal and the Development of

the Tropics; The Canal and the Oriental Trade; The Canal and the West Coast; The Effect of the Canal upon the Domestic Trade of the United States; The Canal and Our Merchant Marine; The Effect of the Canal upon Freight Rates and Railway Development; The Opportunities of Chicago in South America; The Tolls Question; The Canal and the Lakes to Gulf Waterway Project; The Canal as a Business Enterprise.

Considering the importance of everything relating to the Panama Canal, it is hoped that there will be a large attendance at this conference, including representative authorities on Latin America from those countries themselves. It is probable that the Director General and one or two members of the staff of the Pan American Union will attend and participate in the discussions.

SPANISH AND PORTUGUESE IN AMERICAN UNIVERSITIES.

The Pan American Union is carrying on a widespread propaganda in favor of teaching Spanish and Portuguese in all the universities, colleges, and other high-grade educational institutions of the United States. It is also advising their instruction in many high schools, commercial schools, and other institutions attended by young men and women who wish to learn these languages in order to be more familiar with the countries in which they are spoken. It is not an exaggeration to state that largely as a result of the efforts of the Pan American Union over 200 per cent more educational institutions of the United States are teaching Spanish to-day than there were five years ago. While there is not as much attention to Portuguese, the growing importance and prominence of Brazil, where Portuguese is the characteristic language, have created an interest in that language which has caused several universities and colleges to provide that it shall be taught.

PAN AMERICAN REPRESENTATIVES IN LATIN AMERICA.

The letters and reports which the Pan American Union has been receiving from Dr. Albert Hale, special compiler, and Charles E. Babcock, assistant librarian, who have been traveling through South America and securing data on various subjects for the main office, have been most gratifying. They show a remarkable increase of interest in the Pan American Union and its work among the representative and controlling men of the countries visited, especially the educators, the librarians, and the students of these countries, who are anxious to get into closer touch with the office of the Union and to make use of its facilities or supply it with useful data. Dr. Hale has made a point of meeting the leading editors, statesmen, and

business men, while Mr. Babcock has given his attention largely to libraries, book dealers, newspapers, photographers, and other sources of information which will be helpful in improving the Columbus Memorial Library.

AMERICAN SOCIETY OF INTERNATIONAL LAW.

As this issue of the Bulletin goes to press there is being held in Washington, on April 24-26, the seventh annual meeting of the American Society of International Law. The committee of arrangements includes: James Brown Scott, chairman, Clement L. Bouve, Charles Noble Gregory, Charles Cheney Hyde, Robert Lansing, Alpheus H. Snow, and George G. Wilson. The program of subjects to be discussed includes the following: Historical account of Isthmian projects; Comparison of the relative interests of the United States and Great Britain in the Western Hemisphere at the different stages of negotiations; Does the expression "All nations" in article 3 of the Hay-Pauncefote Treaty include the United States? Would a subsidy to the amount of the tolls granted to American ships passing through the Canal be a discrimination prohibited by the treaty? Does exemption of American shipping impose an undue burden on foreign shipping in contributing to the support of the canal? Has the United States the right to exclude from the use of the canal any class of foreign vessels, such as railway-owned vessels? Is it necessary in international law that injury actually be suffered before a justiciable action arises? What is the international obligation of the United States, if any, under its treaties, in view of the British contention? The codification of international law; Continuation of the consideration of the report of the committee on codification. The proceedings will close with the annual banquet of the society on the evening of the 26th at the New Willard Hotel. It is expected that the speakers on this occasion will be men of great prominence in the United States and other countries. All the details for arrangements are in the hands of the competent and able recording secretary of the society, Mr. James Brown Scott, 2 Jackson Place, Washington, District of Columbia.

SCHOLARSHIP FOR STUDY OF SPANISH.

The Director General of the Pan American Union congratulates Col. Crawford H. Ellis, the New Orleans manager of the United Fruit Co., for the interest he is taking in the promotion of the study of the Spanish language. In this connection there is published herewith a letter which the director general has recently received from Lieut. C. B. Hodges, Fourth Infantry, United States Army, dated at Galveston, Texas, March 19, 1913. Although Lieut. Hodges says that

he writes the letter personally, the director general believes that he is not trespassing on any confidence but is showing his appreciation of Lieut. Hodges's interest by publishing his letter in full as follows:

HON. JOHN BARRETT,

Director General of the Pan American Union, Washington, D. C.

SIR: Col. Crawford H. Ellis, the New Orleans manager of the United Fruit Co., and also president of the Pan American Life Insurance Co., has, at my suggestion, established at the Louisiana State University the Crawford H. Ellis travel scholarship in Spanish. This award will consist of a round-trip ticket on a United Fruit steamer to any port in Central America and \$100 expense money. It is open to young men in second or third year Spanish at the university, the selection to be based on the best record for the preceding two years. The beneficiary will be required to spend not less than one month in the country visited, exclusive of time on steamer, and to submit a report in both Spanish and English of not less than 2,500 words, the same to describe the trip, the country visited, the principal city, the people, social customs, commercial conditions, etc.

I consider this action of Col. Ellis very generous and very praiseworthy. It will draw attention to the importance of the Spanish language and will give to a limited number of young Americans a fairly good idea of our sister Republics to the south. The student winning this scholarship will be required to study up on Latin America so as to properly prepare himself for travel there. The BULLETIN of the Pan American Union is one source of information on those countries with which he will be required to be familiar. If Col. Ellis's action were followed at other institutions much good would be the result.

I address this letter to you personally, with the request that, if possible, you give this matter a paragraph in the BULLETIN. My connection with it comes from my having been instructor of Spanish in addition to my military duties while detailed at the Louisiana State University as professor of military science and tactics. I feel that this matter will interest you, and I believe that your influence may serve to bring it to the notice of other public-spirited citizens, who will follow Col. Ellis's example.

Very respectfully,

C. B. HODGES,

First Lieutenant Fourth Infantry—U. S. A.

ADDRESS BY HON. PERRY BELMONT.

One of the most interesting addresses which has been delivered this year is that of Hon. Perry Belmont, former Member of Congress from New York, before the Ancient Order of Hibernians, at the dinner which they held on St. Patrick's day in Bloomington, Illinois, Tuesday, March 18. The occasion was rendered further notable by the fact that there sat at the speaker's table no less a personage than the former Vice President of the United States, Hon. Adlai E. Stevenson. The particular portion of Mr. Belmont's address which has attracted our attention was his reference to the new Secretary of State, who is also chairman of the governing board of the Pan American Union, and to the policy of the United States in its foreign affairs. Mr. Belmont has always taken a great interest in Latin American relations and his comments are worthy of consideration.

PAN AMERICA IN THE MAGAZINES

How the Aztecs Fought, by Harry H. Dunn, in the *Illustrated Outdoor World and Recreation* for January, is a most interesting account of an ancient book or codex which, according to Mr. Dunn, was found by a Mexican archaeologist who has deciphered the pictograph text of the book and translated it into Spanish. This archaeological treasure was found in one of the rooms of an ancient ruin, 8 feet below the surface of the ground, in the village of Tlacolula, near the City of Mexico. Mr. Dunn writes:

Tlacolula was once the seat of a powerful branch of the Aztec nation, a sort of State government, evidently ruled over by Tlacomo, the Tzin, as his name appears as the hero of the book. On the surface of the soil which covers the ruins of what was once a city of nearly 300,000 inhabitants, stands a small village to-day, but, delving away into the ruined tombs and palaces and temples beneath, Prof. Abraham Quintero, an archaeologist of Mexico City, found this book.

The volume, called a codex, is written in what is known as pictographs; that is, highly colored red, blue, green, and black pictures of incidents with ideographs and hieroglyphs in between carrying the thread of the story along with the pictures. It was written about the year 400, A. D., and is about 12 feet in length by 8 inches wide, with one long strip which folds up like a railroad map of the present day. The figures are as clear cut and the colors as brilliant as the day it was printed, fifteen centuries ago. The material of the book is closely woven fiber of the maguey plant. Mexican Indians of to-day have lost all knowledge of the weaving of this fiber, save as it has been taught them by modern weavers, but the Aztecs evidently knew of it, as the book is as fine and soft and durable as a piece of linen cloth.

There are three rows of figures stretching the entire length of one side of the codex, each figure about 2 inches high, with some figures breaking through to occupy the space of two. This is especially true of the figure of Tlacomo, the chieftain in whose honor the book was written. His figure is always larger than that of the warriors depicted, and his throne is always two lines in height, and, in one or two instances, stretches clear across the width of the codex.

The text of this remarkable book, as translated by Prof. Quintero, besides containing a sort of paean of battle, presumed to have been sung by Tlacomo, the Tzin, gives a complete description of the formation of the Aztec military system, their weapons, and their methods of fighting. Mr. Dunn gives the following English version of a portion of the professor's Spanish translation:

At the age of 4 days every male Aztec, whether of the noble or the class, had placed in his hands a bow, arrows, and a tiny shield, or buckler, symbolizing his war-like destiny. This was his christening, and, from that time forward, he belonged to the State until he was 18 years of age, when he was privileged to remain in the army or take to the paths of peace, as he chose. At the age of 13, the boy was placed in the "calmecac" or college of nobles, if of the upper class, and in the "telpuchcali," or



Courtesy of the National Museum of Anthropology, Mexico City.

HUITZILPOCTLI, THE AZTEC GOD OF WAR

The Aztec people, who lived in the Valley of Mexico, were a highly organized society. As a result sacred wars were often instigated between the war-like chieftains of the different Aztec kingdoms, and many of the prisoners taken offered up on the sacrificial altars, the noncombatant inhabitants of the opposing kingdoms being meanwhile on the friendliest of terms. (Illustrating "How the Aztecs Took Their Religion," by *Frederick O. Matthiessen*, in *The World of the Aztecs*.)

military school, if of the lower class. The young nobles received a civil, religious, and military training, and the three branches of life were open to them: they could aspire to any office in the empire, even to becoming a Moctezuma.

In the military school the children of the poor received only a military education, so that, if they did not enter the army as a profession, they became farmers or herders or workers at masonry or one of the trades. When a youth entered one of the 20 military schools in the city of Tenochtitlan (on the site of which Mexico City now stands) his head was shaved, with the exception of a single lock of hair at the back. He was taught to handle arms, to shoot at targets with arrows and with hand darts, and to strike accurately with the mace at wooden dummies.

As these boys reached the age of 16 they were allowed to go to real combat with the soldiers, each of whom took a boy under his protection. When the novice captured his first prisoner, he was given a banquet and the lock of hair which he had worn since his entrance to the school was shorn from his head. When a young noble had captured five enemies, he was given the order of the Knight of the Eagle, or the Knight of the Tiger, accordingly as he belonged to either family. The former used the helmet which represented the open-mouthed head of an eagle, between whose jaws appeared the face of the warrior. The aspirant to this honor must kill for himself the eagle, from whose feathers the headdress was made. On his shoulder was a small mantle, also of eagle feathers, and he carried a shield, painted to represent an eagle.

The Knights of the Tiger slew for themselves each a "tiger" or jaguar, and, when they obtained the right, had made for themselves a headdress representing the head of the tiger, through whose jaws appeared the face of the warrior. A mantle of tiger skin was worn on the shoulder and the shield bore the insignia of the tiger clan.

Huitzpochtli, the God of War, was the bloody deity who ruled the army, and was also the supreme being of the entire race. His priests declared that he demanded more and more human sacrifices, and it was this need of the god that kept the Aztecs in a constant state of war. * * *

The Aztec army, garrisoned in Tenochtitlan alone, numbered about 20,000 men; with the allies, it must have reached nearly 50,000, according to ideograph figures given in the codex. Its organization, all described in pictures on the fiber book, was as follows:

One general in chief, four grand chiefs, each one of whom commanded a "calpuli;" captains of squadrons, captains of vanguard, chiefs of special service, or the Otonca (warriors who had captured 6 enemies), and, lastly, the men of the famous rear guard, or "quachic," formed of athletic and vigorous warriors, who had taken more than 10 captives.

The arms, as shown by the codex, consisted of bows and arrows, slings and stones, hand darts, and the "atlatl," a sort of cross bow, all used by the light infantry. The heavy infantry fought for the most part with "macanas," heavy wooden clubs with three rows of flint teeth; maces with heads of "itzli," or volcanic glass, and tempered copper battle-axes, the blades of which have been found in the tombs and on the battle fields of the Valley of Mexico; and protected themselves with heavy wooden and fiber and leather shields, sometimes nearly as large as their bodies.

It must be remembered that the Aztecs had no cavalry, never having seen a horse when Cortez landed at Coatzacoalcos. The 20 chiefs commanding the 20 regiments of 1,000 men each wore breastplates of hardened copper, carried lances with copper points and with the standard of the regiment trailing from the head of the lance which



FIG. 105. SECTION OF THE AZTEC CODEX MENDOZA.

SECTION OF AZTEC CODEX

FIG. 106. A SECTION OF THE AZTEC PICTOGRAPHIC BOOK, THE AZTEC CODEX MENDOZA, SHOWING THE HISTORY OF AZTECOTZOTZOTL, THE AZTEC GOD OF WAR. MEXICO, 1591. (From the original, now in the National Museum, Mexico City.) It is claimed that this pictograph book, compiled about the year 400 A. D., gives a very complete account of the education and training of the youth and of the military system of the ancient Aztecs, as set out in "How the Aztecs Fought," by Harry H. Dunn, in the January number of the *Illustrated Outdoor World and Recreation* (New York).



FIG. 107. IMPLEMENTS OF WAR OF THE AZTECS.

IMPLEMENTS OF WAR OF THE AZTECS

The upper row shows the tempered copper axes; the second, a copper ax and arrow and spear heads made of volcanic glass (called iztli); the third, stone heads for battle axes.

was carried erect. A long trailing headpiece of brilliantly colored parrot feathers adorned the top of the head, while the more vital parts of the body were protected by a tunic of quilted cotton or fiber. The soldiers of each regiment stained their faces and bodies the same color as that of the standard of their chief, so as to be recognizable by their comrades in the heat of battle.

Detailed descriptions of the formations, modes of attack, and the general conduct of a battle follow.

Dwellers of the Depths, by Day Allen Willey, in the December, 1912, number of *Outdoor World and Recreation*, is an interesting account of a tribe of Indians living in one of the side canyons which branch off from the Grand Canyon of the Colorado. The magnificent scenery of this section of northwest Arizona, where the Colorado River plunges into and through the enormous cracks in the earth's surface known as canyons, is generally known and justly celebrated. That human beings permanently dwell far down in these depths, living lives almost as primitive as did the cave dwellers of old, is a fact that is not so generally known, and Mr. Willey's entertaining article will doubtless arouse a new interest among those who know something, and wish to learn more, of the rapidly disappearing tribes of the aboriginal Americans. The following excerpts will serve to show the author's graphic style in dealing with a phase of human existence with which very few are familiar:

Whether the force of the earth's pent-up fires or some other cause made this mighty chasm and its branches is still a problem to the geologists, but it is there and, strange as it may seem, forms the abode of human beings—people who literally live under the world, for the places they call homes are caves in the rock walls thousands of feet below the earth's surface. In the depths of the canyon they remain winter and summer, except when a few may scale the lofty precipice to hunt game or to barter their handiwork for pottery and food with their nearest neighbors, the Hopi Indians. For over a century the black walls of the abyss have been reflected in the blaze of their camp fires and have echoed the sounds of the songs of rejoicing and their weird chants over their dead, for these strange people are of the red face and form one of the most interesting of the existing tribes of Indians.

In some of the ancient missions of California and New Mexico are carefully preserved records that tell many a thrilling tale of the mysterious past of the Southwest—especially the wanderings and adventures of those heroic priests who were among the first white men to penetrate a region which was a sealed book to the civilized world. In these records the name of Garces appears many times, for this brave Franciscan friar journeyed over the desert, crossed the mountain pass, explored valleys and canyons long before any other pioneer ventured into the part of the Southwest which he penetrated. As far back as 1776, the year when the colonies declared their independence, Father Garces stood on the rim of the Grand Canyon and saw the awful grandeur of its desolation. When the friendly natives told him others of their kind actually lived in one of the side canyons the explorer did not believe it, but as they offered to show him the way, he followed and came to the edge of what the geographers know as Cataract Canyon, and in one of its rifts he found these inhabitants of the under world.

For at least two centuries and probably longer the Havasupais have existed in this hole in the earth which they call home. There is an Indian tradition that at one time in the past ages they lived in the valley of the Little Colorado River and even

in the shadow of San Francisco Mountains. They slightly resemble in features the Yuma tribe on the lower Colorado River, also the Pueblos, but so long have they been in this recess of the canyon that their language, dress, and customs differ greatly from any others of the red faces of America. The few travelers who have risked their lives to get down into this canyon say that they are finely modeled specimens of men and women. Their cheek bones are not so large as are usually found in the Indian and they can not be called hatchet faced. Most of them wear garments of buckskin, which show that they are much more expert in the tailoring suited to the red man than other tribes of Arizona and New Mexico. But they excel in basket making. From a reed which grows in the bottom of the canyon they make a basket which is truly an artistic piece of workmanship, not only in shape, but even in color, for they tint the outside a beautiful hue or blend of colors by using a pigment made of red ocher, also a blue paint they prepare from the wild indigo. Strange to say, they know little or



Courtesy of Illustrated Outdoor World and Recreation

A HAVASUPAI SUMMER RESIDENCE

"The tribe follows one of the American fads, for the people have their summer as well as their winter homes. With the coming of spring they build rude huts or cabins of the reeds they use in basket making, also branches of the few stunted trees that grow in the canyon. Sometimes the framework is partly covered with buckskin, but usually it consists only of the reeds and branches, and may be only a thatched roof open on all sides. The huts are built close to the gardens and fruit trees, for everyone turns farmer during the spring and summer, except the basket makers. When the shorter days show that winter is coming on, they leave the huts and literally become cliff dwellers." (Illustrating "Dwellers of the Depths," in the December Illustrated Outdoor World and Recreation.)

nothing of pottery, and the few jars and vases they have are obtained in trade with the Hopis.

Cataract Canyon is true to its name. In a distance of 16 miles, the Colorado tumbles and swirls over no less than 75 different rapids and cataracts. In this canyon the waters of Havasupai Creek merge with the river. Most of the side canyons that form such a network of cracks in Arizona's surface are as dry as the desert itself, except when a heavy rainfall or melting snow in the spring partly fills them with turbid torrents which ebb away in a few hours, leaving the canyon desolate in its barrenness. But the little Havasupai is an oddity in this region, for it seldom dries up. Consequently it usually contains enough water to at least moisten the earth of the valley through which it flows. Like other soil in the so-called arid America, but a small quantity of water is needed to bring forth crops in abundance, so away down here in the depths one may see a strange picture at harvest time. In the bits of gardens are growing corn, melons, calabashes, even huge sunflower plants, for to the Havasupais

a meal of sand-lower seed is a delicacy. They raise a peach and apricot tree here, heavy with luscious fruit. Few white farmers are as skillful as these Indians in tilling the ground, but they have so little of it that they must make the most of it to live.

These little gardens supply food for the tribe from spring to fall, all of the surplus being carefully stored for winter consumption. The hunters climb to the top of the canyon before winter sets in and kill enough deer to serve for food and clothing for the season. With the coming of spring rude huts are built of reeds and the branches of the stunted trees that grow in the canyon, close to the gardens and orchards, for everyone turns farmer for the time being, except the basket makers. When the shorter days of winter come these flimsy huts are vacated and the Indians become cliff dwellers. In the canyon centuries of erosion have hollowed out caves and openings in the rock walls, and these are frequently enlarged by cutting out the soft sandstone with other sharp-edged stones, until the head of each household has accommodations for his wives and children. They have practiced polygamy for centuries, and ability to provide food and shelter is the only limit to the number of wives the Havasupai men may have.

Some few years ago when information relative to this tribe of Indians reached the United States Government officials, it was decided to set aside the place as a reservation, and about 50 square miles have been surveyed and mapped out. This territory is extensive enough, perhaps, for the entire tribe is said to number not over 250.

To Our Friends in Argentina is the title of the leading article in the March 13 issue of *Arms and The Man*, the principal theme of which is a description of a statue sculptured by Gutzon Borglum, and which is to be presented to the *Circulo Militar*, of Buenos Aires, by a number of United States Army officers and other American friends who have been guests of this exclusive military club at different times in the past and who are taking this graceful method of showing their appreciation of the many courtesies extended. In introducing the subject of the statue the article dwells on the high type of Argentinos as follows:

It is a pity that the citizens of the United States know so little of the citizens of that strong, fine, sister Republic, Argentina. However, it is encouraging to note that each year the acquaintance grows, and it must continually increase.

Argentinos are as much entitled to be called Americans as are the citizens of the United States; possibly more so, because their ancestors occupied the land where these other Americans dwell before our own progenitors landed in the United States. Argentinos are a proud people, and they have a right to their pride. They have made a great nation from diverse, discordant, and recalcitrant elements.

Their Latin-American civilization is to-day as genuine and as prosperous a plant as is our own Teutonic-American civilization. Their affairs are well regulated. Their public men are men of the world. They are in truth the Yankees of the South. They are proud to call themselves so, and we Yankees of the North should feel proud to have them do so.

Representative Argentinos who have visited this country have impressed themselves upon our people as have scarcely any other men of alien race. The officers of the Argentine Navy who have been in the United States supervising the construction of the two great battleships which our yards have been building for Argentina, have so borne themselves that their fellow craftsmen, the officers of our Navy, and all others who have come to know them, respect and esteem them for their many high qualities.

Dr. Romulo S. Naon, the present minister of Argentina to the United States, a highly cultivated and broadly educated gentleman, who would adorn the highest place within the gift of any nation, is a good example of the best class Argentino.

When the Pan American rifle tournament was held in Buenos Aires, in May, 1912, the generous and gracious hospitality offered the team from the United States was very gratifying to the recipients and to the American colony in general. The United States military attaché to Argentina at that time was Lieut. John S. Hammond, and upon his return to this country last summer, and upon consulting with Gen. Leonard Wood, Chief of Staff, and other prominent Army officers, he decided to start a subscription with which to purchase some small memento to present to the Circulo Militar, as a token of appreciation and esteem from their erstwhile guests.

Mr. Gutzon Borglum ranks as one of the greatest sculptors of the United States, and his artistic conception, "Sheridan at Cedar Creek," is a subject that will appeal especially to the military spirit of the fine social and military organization to which it is to be presented. As soon as the statue is completed it will be forwarded by Gen. Wood personally, not by him as Chief of Staff nor in any official capacity, but merely as one of those who have been entertained by the Circulo Militar, and as one who joins with the other appreciative guests in attempting to thus express in some small measure their gratification and pleasure in having known the officers of the Argentine Army.

The article in Arms and The Man concludes with the following paragraphs:

Argentinos are like us—progressive, wide-awake. They believe in taking for their use the best they can find wherever they find it. Quite naturally they turned in the beginning to Germany with its magnificent machine-made army, especially as Germany was not only willing but anxious to help for the good it would do toward strengthening friendly political and trade relations. However, there are not lacking Argentinos who believe they want little more knowledge from Germany. A considerable number realize that the spirit of their North American brethren is more like their own spirit and that it might be well to take advantage of North American military training in so far as that may become practicable.

The Argentino, with his high individual intelligence and initiative, could be expected to learn more of Americans, because he is much more closely related to the American in habits of thought and ways of action than he is to the German. Over 50 Argentino officers are now on duty with German troops, and 7 German officers are serving with the Argentine Army. The Germans have helped greatly to make a first-class military force for Argentina, but the pupils have outgrown their teachers. Many Argentino officers are as conversant with the military knowledge of the whole world as are our own widely educated officers.



SHERIDAN AT CEDAR CREEK

statuary group typifying North America, placed at the north entrance to the building of the Pan American Union.

It is to be hoped that such steps may be taken as will permit a more free interchange of military knowledge and all other forms of information between the "Yanquis" of the North and the South, the Argentine and the American.

America and Europe Compared—Are Americans Practical Men or Idealistic Dreamers? in the January number of Hearst's Magazine, is the second of the series of articles by the great Italian historian and philosopher, Dr. Guglielmo Ferrero. The first of the series, in which



Courtesy of Hearst's Magazine.

AMERICA AND EUROPE COMPARED.

"America is an immense, naturally rich continent, where capital accumulates quickly. Having ready command of capital, and therefore of the countless hands that the overpopulated regions of Europe have been furnishing to all countries that needed them for upwards of a century, America has been able to exploit her land and mines at high speed."

Dr. Ferrero dwells on his first impressions relative to the spirit of American progress which prevails throughout the two American continents, was reviewed in the December MONTHLY BULLETIN. In the second article the author digs below the surface appearance of our strenuous civilization, and comes to some rather remarkable conclusions anent this "Demon of American Progress."

At the outset the Doctor was struck with that curious phase of idealism in the United States evinced in the extension of the suffrage to ignorant and unassimilated elements in our body politic. In this connection he writes:

I thus had grown to North America with the common European idea that Americans excelled the rest of the world in the prompt adoption of that all-American word, suffrage.



THE COST OF LIVING IN THE UNITED STATES

The Doctor writes: "The growth of the machine civilization of the United States has been so rapid that the material wants of the people have increased more rapidly than their wealth, and their machine civilization is whirling in the vicious circle of an insoluble contradiction."

never indulged in dreams; that all Americans lived in the thick of reality, absorbed in the sharpest and swiftest conquest of wealth, leisure, power, dominion over nature—the concrete, tangible, certain good things of life. * * *

So I expected to find many facts and few ideas in America, together with a keen and vigorous and widely diffused egoism; and, inversely, little idealism, little faith in transcendent principles of the kind that so often betray dreamers, whether individuals or nations, into chimerical attempts to gather rainbows.

For these reasons I was astonished at the outset by America's policy in regard to the hordes of immigrants that pour into her ports each year from every conceivable center of the Old World. * * *

To confer citizenship each year upon great numbers of men, born and educated in foreign countries—men who come with ideas, predilections, and sympathies totally out of spirit with the diverse conditions in the new country; to grant them political rights they do not want and of which they have never thought; to compel them to declare allegiance to a political constitution which as often as not they do not understand; to try to transform subjects of old European monarchies into free citizens of young American Republics over night—is not all this to do violence to common sense? Does not this policy multiply the already great difficulties besetting representative government, without any corresponding advantage, not even that of rooting the immigrants to the soil?

For the crowds that leave Europe for America to-day are no longer inspired as they once were by a thirst for liberty and a passionate desire to exchange the status of subjects for that of free citizens. They are attracted by the prospect of higher wages, an easier and ampler life, better chances of getting on in the world.

To open the schools and colleges, professional careers, and public offices to the children of such immigrants on precisely the same conditions with native children, is a far better way of rooting them to the soil than granting them the franchise.

Such is the policy that the States of South America have pursued in the past and are pursuing to-day.

With these impressions and opinions I turn from South America to that America which stands to all the world as the symbol of the practical spirit. And there to my no little surprise I found an exactly contrary policy in operation, attended by all the consequences, which one would have anticipated—notably the increasing difficulty of making democratic institutions work with an electorate so enormous, so rapidly growing, so varied and heterogeneous. * * *

Consider how many of the difficulties and inconveniences which Americans face in their domestic politics spring from this unrestricted size of the electorate and from its heterogeneity. Both phenomena are unique in the history of the world, all democracies having hitherto governed small and often extremely small States. It is difficult to foresee the ultimate result of this new and most daring experiment which America is carrying on without the constraint of any historical necessity whatsoever. * * *

How then did the present policy get established?

Certain historical accidents no doubt had much to do with it; but historical accidents would not have sufficed without the backing of that impractical, I had almost said mystical, conception of democracy which I discovered in so many Americans.

For the doctrine of popular rights in America is not an instrument to be used by the nation and its rulers for the attainment of certain practical ends, or to be applied with such restrictions as will insure good results and forestall evil ones. It is a transcendent principle. I had almost said an article of faith, to be applied and developed regardless of immediate consequences, which if they happen to prove disagreeable or even perilous for the moment, must be borne with patience in the conviction that since the principle is just and true, its ultimate result must be beneficent.

Little by little such reflections led me to ask myself whether in political matters, at least, the people of South America and Europe might not be more practical than the citizens of the United States—whether, inversely, the North Americans were not the dreamers and idealists.

The next phase of our idealism to strike the Doctor was the inexhaustible bounty the wealthy classes in the United States bestow upon educational institutions and learned or political or social

foundations. To his amazement he found that rich people whose one idea was to spend for the good of mankind or the improvement of their country were probably even more numerous in the United States than in Europe. Moreover, he was struck with the difference between European and American benefactions in that

American cities are not indifferently inspired by a passionate, and I should almost say a naive, faith in their ability to conquer human misery and the travail of life. An American will often set himself with fervor and with great expenditure of brains and money to eradicate evils that to Europeans seem incurable. This faith in their ability to straighten nature out, to clip her claws and purify her, not infrequently seemed to me, as it has to many Europeans, to border upon the chimerical.

Continuing this train of thought, he writes:

The point is, however, that here again the Americans appeared more idealistic, more prone to dreams, less practical than Europeans. With a propensity unheard of in Europe they will set out to slay the innumerable dragons of life without any certainty of success, but with the inspiration of a mystic faith that all things must somehow turn out right in the end.

And so every now and again my observations impelled me to put this question to myself: In spite of their great practical activity, are not the people of the United States a much more mystical and idealistic nation, a people much more given to dreams than Europeans are accustomed to believe?

In reflecting upon the tremendous energy and great wealth of the country the author asks himself some pertinent questions such as, Why the masses in America, with its greater wealth, are yet unable to live better than the masses in Europe; Why the houses in the great American cities are everywhere so small; Why the distances are so great, the means of communication so difficult, the cost of living so high; That notwithstanding the immense national wealth it is harder for the common people and the middle classes to live than in many cities of Europe where wealth is much less abundant?

The first question he answers:

The cities have become too large and populous, their growth has outstripped the growth of agricultural production. One section at least of the population has contracted excessively expensive habits and has accustomed itself to too great luxury.

Why have the cities grown so rapidly? He replies:

Because industries have developed so rapidly. America is an immense, naturally rich continent, where capital accumulates quickly. Having ready command of capital and therefore of the countless hands that the overpopulated regions of Europe have been furnishing to all countries that needed them for upward of a century, America has not only been able to exploit her lands and mines at high speed, but has been able to multiply her industries, of which the congestion of her cities is a by-product.

This leads the author to a consideration of what he calls a "machine civilization," anent which he writes:

The wealth and prosperity which machinery produces is only apparent. Because instead of reducing the energy essential to the production of the necessities of life, and therefore reducing their cost, machinery actually increases both.

In the case of America, however, he admits that she has not blundered or been the victim of a delusion in carrying the rapid development of machinery across the continent, for by so doing she has been able to win an unprecedentedly rapid mastery over her immense territory. He dwells at some length on the miracle which machine civilization has achieved in the New World, and finally concludes that—

American progress is therefore a transcendent and mystical idea which, inflaming America with passion, impels her to complete her unprecedentedly rapid conquest of a continent and whose contradictions and absurdities it is a waste of logic to uncover.

But just when he had solved the American problem the European problem presented itself to him in a new form.

If American progress, if machinery, if the quantitative criterion of perfection, are essential to the achievement of the great historic task to which the United States have dedicated themselves, what is the explanation of the fact that machinery multiplies, the American idea of progress spreads, and the quantitative criterion prevails in European States?

It is this larger problem, the conflict between quantity and quality, which dominates both worlds, that is to be dealt with in his next article.

The Renaissance of Venezuela, by Marcos J. Traizivuk, is an appreciative article in the March number of the National Magazine, dealing with the recent progress and prosperity of Venezuela. In speaking of the general ignorance which prevails in the United States relative to this most northern of the great Republics of the South American Continent, the author writes:

Venezuela, our nearest South American neighbor, is the land of the legendary "El Dorado," which was so long the goal of Spanish and English adventurers in search of gold in the sixteenth and seventeenth centuries. The birthplace of the great liberator, Simon Bolivar, who defied Spanish power in South America, and gave independence to half of the South American Republics, is strangely enough not as well known to Americans as other and more distant South American countries. For the past century its story has been one of struggle and rebellion, but a new day has dawned and what was one of the most "topsy-turvy" of Latin-American countries has settled down into a peaceful and prosperous Republic, which is promising to become in the near future one of the greatest commercial centers on the American Continent. "Peace and Labor" is the motto in Venezuela to-day.

This wonderful transformation and progress which is taking place is only in its infancy. With the departure of Gen. Cipriano Castro, revolution has passed into history, and the people of Venezuela are looking to-day toward a great future, after the four years of peace during which Venezuelan destinies have been placed in the hands of her patriot president, Gen. Juan Vincente Gomez.

The author enumerates a few of the many reforms brought about since the Gomez administration began, giving credit to the President for such notable achievements as the following:

That he has established peace and order is the first and most important step toward the prosperity of Venezuela. The national debt, amounting to several millions of



THE CAPITOL, SANTIAGO, CHILE.

The capital of Chile, in the center of the country, the city of Santiago, Chile, is a beautiful city. It is a city of the future. It is a city of the past. It is a city of the present. It is a city of the future. It is a city of the past. It is a city of the present. It is a city of the future.

dollars, has been extinguished during the short period of his administration, and strained international relations have been resumed, thereby gaining politically and commercially the confidence of the world at large. The organization of the army has put it on a footing with the most modern and up-to-date military establishments. The extension and reform of public instruction are other important undertakings. Public roads are under construction throughout the country. Industrial improvement is visible in every section and several railroad companies are extending their lines. Public sanitation is almost under absolute control, and the seaport of La Guaira, for many years a pesthole of yellow fever and cholera, is being transformed into a clean and healthful city. Foreign enterprises are being encouraged under the most favorable conditions, and important steps have been taken to bring in the most desirable European immigration. These are some of the most notable proofs of what a Latin-American country can accomplish when peace and order are permanently assured.

In speaking of the vast natural resources of the country which have heretofore remained comparatively undeveloped, Mr. Trazivuk says:

It is only recently that the Venezuelan people have realized the immense natural wealth of their country, and have endeavored to place Venezuela among the leading Latin-American Republics. Some of the largest American corporations have realized the great resources of Venezuela, and already there are several American companies seeking to obtain concessions for large enterprises.

The following is the author's description of the charming capital of Venezuela:

Caracas, just beyond the Silla, or ridge of the mountain range, is a fine Latin-American metropolis of about 100,000 inhabitants, sheltered by gorgeous mountains rising almost perpendicularly around it. The city has many beautifully situated and attractive plazas, boulevards, and avenues, with more now under construction. Bolivar Square, located in the heart of Caracas, is the chief rendezvous and promenade of Venezuelan society. Conspicuous buildings, such as the capitol, cathedral, university, and military academy, grace the city, particularly the historic Miraflores Palace, the official residence of the President.

Every foreigner who has visited Caracas has been charmed by its society, whose luxury, accomplishments, and fashions rival those of the larger cities of Europe and America. The beauty and elegance of the ladies of Caracas bring high tributes from the stranger visiting the capital, for here are to be found the rarest types of Spanish beauty among the direct descendants of the old Spanish conquerors of South America.

The author concludes with a tribute to the courtesy and hospitality of the Venezuelan people extended to strangers, and cites the instance of the visit of the Secretary of State of the United States, when the three days of his stay in Venezuela were declared official holidays by the Government as a special mark of respect and esteem for the representative of their great northern neighbor.

South American Newspaper Notes, by Ernest T. Simondetti, is an article in *The Editor and Publisher* of January 18, 1913, in which journalistic conditions and tendencies in some of the leading countries of South America are discussed. In regard to South American journalism in general Mr. Simondetti writes:

Argentina, Brazil, and Chile are the South American countries which, owing to their great economical development and to the influx of European emigration, have assumed more rapidly a distinct individual character which is reflected in their press.



STATUE COMMEMORATING THE 10TH OF APRIL.

Monument representing the English, American, and Mexican people who participated actively in the movement for liberty during the agitation for freedom in 1810-11.

While in general appearance the large South American newspapers resemble their English contemporaries, in the treatment of news they follow more closely the French and Spanish methods. * * *

In the writing of news stories the chronological order is usually strictly adhered to, so that often the most important facts are contained in the last paragraphs. As to heads, they consist of one or two lines, and occasionally they chance to give a correct idea of what the article is about. The South American editor persists in regarding the use of more elaborate and explanatory heads as a manifestation of dangerous sensationalism. That even a busy man, at times, must read the whole newspaper before finding what he wants, has no effect in changing the editor's deeply rooted point of view.

It is but seldom that more than one editorial appears at a time. This is usually well written, but much longer than the average editorial in American newspapers. * * *

Leading dailies of the southern continent publish a greater amount of foreign news than the corresponding American publications. This lesser degree of "provincialism" on their part, in some countries is due to the absence of a great social and political life, and in others to the presence of large foreign colonies, composed of Latins who, possessing either an identical or similar language of the adopted country, constitute a potent element in the circulation of newspapers.

With the exception of *La Prensa*, of Buenos Aires, all the dailies referred to receive their telegraphic news from the French agency, "Havas." Some of them, however, as *La Argentina*, of Buenos Aires, and *El Mercurio*, of Chile, use also brief supplementary services from special correspondents.

Although the home office of the "Havas," in Paris, receives from the Associated Press an American news service of 600 words per night, only a few of the items find their way to South America, and they usually refer to disasters, railroad wrecks, floods, and lynchings.

Sunday editions are sometimes larger than those of other days, but they do not strive after special features, and no effort is made to divide them into sections according to subjects. Extras are but rarely issued.

In Argentina and Chile the daily newspaper advertising is large, frequently larger than in New York, but it does not increase perceptibly on Sundays, while in Rio de Janeiro Sunday advertising is becoming much heavier than that of other days.

Among the leading dailies of Buenos Aires to which Mr. Simondetti refers are *La Prensa*, *La Argentina*, *La Nacion*, as morning papers, and *La Razon* and *El Diario* as the leading afternoon papers. Special attention is given to the policy, equipment, and influence of *La Prensa*. Regarding the papers of Rio de Janeiro he writes:

The leading morning newspapers of Brazil, published in Rio de Janeiro, are: *The Journal do Commercio*, *the Journal do Brazil*, and *O Pais*.

The greatest rivalry exists between the first two mentioned. *The Journal do Commercio* is a very influential, but extremely conservative newspaper, owned by Carlos Rodriguez, a prominent Brazilian journalist and business man, well known in the United States, where he resided many years.

The Journal do Brazil, whose proprietor, Count Almeida, is at present in this country on a commission from his Government, although a much younger publication, has made rapid strides on account of its modern methods. Both these newspapers publish from 12 to 24 pages daily, with large Sunday editions.

The article closes with the following complimentary paragraph relative to *El Mercurio*, of Chile.

Chile has one large modern newspaper, *El Mercurio*, which publishes simultaneously two editions; one in Santiago, the Federal capital, and one in Valparaiso, the principle

points with the two cities are less than 100 miles apart. The *El Comercio* are modern and contain several departments managed for the benefit of the public. The paper is strictly up to date in every respect and publishes from 16 to 24 pages daily.

Investments in Mexico, by Percy F. Martin, in the March issue of the *Financial Review of Reviews*, is a conservative and at the same time a very hopeful consideration of the industrial situation existing in the Republic and of its financial stability in the future. That the recent political upheaval was attended by so little disturbance of Mexican securities held in the financial centers of the world is a remarkable attestation of the confidence in the integrity of the Mexican people as a whole which seems to pervade the business world.

Nations, as well as individuals, are judged as to their integrity by past history. Mexico has always met its financial obligations fairly and squarely, and that fact has established a credit which even internal political changes of the most radical character have not affected appreciably. In considering the negotiation of a loan which will be needed to meet pressing exigencies and to readjust conditions in the Republic upon the reestablishment of constitutional government and permanent peace, Mr. Martin writes:

The credit of the Mexican Republic under a stable and permanent government ought to prove as sound to-day as it was two years ago, when the 4 per cent external gold loan for £22,200,000 was easily arranged, the first half of it being issued in Paris. It will also be remembered that early in the following year (January, 1911) the Mexican Government exercised its option of earlier redemption of the 5 per cent loan of 1899, by purchasing £10,433,820 of the bonds of the latter, such purchase being effected mainly out of the proceeds of the 1910 Paris issue of £11,100,000. * * *

The pressing obligations of the Republic are not great, the larger part of the payments requiring immediate attention relating to certain railway construction subsidies, which, it is pointed out, can very well be allowed to wait until the financial conditions of the country are a little better. Acting upon the advice of the late minister of finance, before their adjournment in December of last year, Congress authorized a 5 per cent loan of 20,000,000 pesos (£2,000,000), and another of 40,000,000 pesos (£4,000,000) bond issue, the latter being intended for railways and public works and indemnities in connection with the revolution of 1910. In view of the considerable excess in damage done to private and public property as the result of the proceedings of last month (February), it is difficult to say what sum will now become necessary for this purpose. The Government under the late Sr. Madero gave its undertaking to pay for all the damage occasioned to foreign property, and there is little reason to suppose that their successors, anxious as they will be to conciliate foreign opinion, will depart from this expressed policy. * * *

In regard to present conditions in Mexico, history is merely repeating itself. In 1911, after the Madero rising and the expulsion of President Diaz, it was thought that confidence in Mexico as a field for investment might have been shaken, and it was looked upon as highly improbable that the new Government would endeavor to float an issue of securities, owing to the effect of the revolution upon the mind of outside investors. But public opinion swerved very quickly, and so far from regarding the prospects of Mexico gloomily, there appeared to be no great timidity concerning the safety of the issue.



PORT OF TAMPOCO, STATE OF TAMULIPOS, MEXICO

Tampico is one of the largest of the 27 States of Mexico, having an area of 32,268 square miles, and a Gulf coast line of 270 miles. Tampico is 45-46 miles of port, tanking next to Veracruz in the east coast trade of Mexico, and all steamship lines serving the latter place also in the Tampico of 110 miles of port. As shown in the picture, vessels be alongside the wharf, thus facilitating the transshipment of the freight to and from the railways. The Mexican Central crosses the State from Tampico to San Luis Potosi, and the Mexican National operates a division line between Tampico and Monterrey. A good way to connect Tampico and Matamoros by a direct line. The rapidly growing commerce and wonderful natural resources of States like Tamaulipas are important factors in stabilizing the good end of Mexico, dealt with in "Investments in Mexico," by Percy F. Martin, in the March issue of the *Financial Review of Returns*, London.

of 1911, has been the comparative calm with which holders of Mexican bonds on this side have maintained their position. It will be remembered that when the existence of the old régime in Mexico began to be seriously threatened, toward the end of 1910, there occurred a certain amount of uneasiness, but even in those circumstances the astute minister of finance succeeded in securing a large foreign loan, while throughout the spring and early summer of the following year, in spite of all the revolutionary news which came to hand daily, and even in face of the first acts of the Madero provisional government in May, Mexican bonds varied only a fraction in price. During the past two or three weeks the same remarkable phenomenon has been observed, a fact which speaks very eloquently for the innate confidence which is felt in Mexican securities as a whole.

Of the different Mexican issues—Government, provincial, municipal, railroads, etc.—it has been estimated that there are more than 400,000,000 pesos negotiable at the Paris market. Nevertheless, the advices which come to hand almost hourly from that quarter have indicated that even for the most speculative issues the alarm occasioned has been by no means sufficiently pronounced to attract special attention. On the other hand, the markets have shown themselves to be extremely sensitive to every little move recorded in connection with the Balkan situation.

From the first it has appeared that holders of Mexican Government issues were confident that whatever new Government came into power, or whether the old remained, the national obligations would be recognized, and thus they very wisely refrained from throwing over their securities. As upon the previous occasion referred to, when political troubles attracted attention, the Mexican Republic's bonds covered no greater range than did New York City bonds, British consols, French rentes, or German Government bonds, Mexican 5 per cents on the London Stock Exchange having varied within a radius of a few points.

A Trip Through Brazil, by Albert Hale, in the Bay View Magazine, Detroit, Michigan, for February, is a well-written article which gives a comprehensive sketch of several of the larger States of Brazil, touches on the country's agricultural, pastoral, and industrial possibilities, its railway facilities, its educational system, and gives an analysis of the dominant characteristics of the people as a whole from a North American viewpoint.

Relative to the agricultural and pastoral development of the country Mr. Hale writes:

Brazil is destined to become one of the greatest if not the first agricultural land on the globe. It has the land, the climate, and soon will have that essential to agricultural profit, cheap shipping facilities. A Mexican syndicate has recently purchased 50,000 acres in northern Brazil for a stock ranch, and while the cattle, horse, and sheep industry does not yet compare with Argentina, yet it is making a rapid advance. There are large arid sections, and already the Central Government is constructing vast irrigation works. The department of agriculture is a big benefactor. It maintains several agricultural colleges, experimental farms, and maintains a large corps of trained specialists whose investigations are assisting the farmers. * * *

Brazil is as rich and fertile as any land, and just as accessible; millions of human beings can find homes where is to-day only the nomadic Indian. Scarcity of water for drinking and irrigation need not be feared, and the rushing streams will supply power so that coal may be forgotten. In riding through the country plenty of earthly paradises are to be found, yet even when they are inhabited the conditions are so primitive that nature blushes at the little man has done to uplift her.



THE FISCAL PIER AT VERACRUZ, MEXICO

The city of Veracruz is the premier port of the Republic, and the natural gateway of the country through which passes more than one-half of the foreign maritime trade, and approximately one-quarter of the total imports and exports. It has always been used actively, but not so many years ago was inadequate for the purpose. Then the Mexican Government decided to improve it up to modern standards, and now it is safe and commodious, able to accommodate large steamers alongside the pier.

The railway systems of Brazil are thus dealt with:

They were originally established not with the idea of affording facilities for internal commerce, but with the great purpose of bringing the products of a contributing interior territory to the nearest seaport and of distributing to this interior the merchandise brought in from abroad. On the Atlantic coast, Recife (Pernambuco) is the focus of one system, Sao Salvador (Bahia) of another, Rio de Janeiro of a third, Sao Paulo and Santos (the coffee region) of a fourth, and Rio Grande do Sul, in the extreme south, of a fifth system. In recent years the Government has felt the need of connecting these various systems by interior railways running north and south, both to afford interior communication independent of the ocean and to stimulate an internal commerce and settlement. This plan has been successful north and south of Recife, so that to-day it is possible to travel by rail between the ports of Natal and Maceio, and between Rio de Janeiro and Sao Paulo. South of Sao Paulo construction has been rapidly extending through the States of Parana and Santa Catharina toward the Uruguayan frontier. The total mileage of railways in operation in the Republic at present is 13,279 miles. The building of these roads has been the great employing industry of Brazil for a number of years.

Mr. Hale concludes his sketch with the following paragraph:

After completing a tour of Brazil and her beautiful cities, there is one conclusion that we must arrive at, and that is, Brazil needs our American spirit. The field is greater than it was in Mexico a generation ago, and there is a sympathy from all classes toward a manifestation of Americanism. Brazil has grown sober and sensible, and no longer listens to hot-headed revolutionists. But while she has not yet beaten her spears into pruning hooks, nor her swords into plowshares, yet she is at peace with the world, and complacently views her vast internal improvements, and is rather bent on enjoying the fruits of industry than the uncertain glory of strife.

The Mighty Amazon, by M. R. Wright, in the February Bay View Magazine, is a descriptive article dealing with the greatest river system in the world and the country drained thereby. Save the fact that it is the largest river in the world, so little is definitely known by the average citizen of the United States relative to this stupendous stream and its great tributaries that we herewith quote some of the paragraphs of the article dealing with a few of the important features:

The entire basin of this mighty river covers an area of 7,000,000 square kilometers (about 4,450,000 square miles), of which a part belongs to Peru, Ecuador, and Bolivia. At its source the river is named the Marañon; on the border of Brazil it takes the name Solimoes; and after its confluence with the Madeira, it becomes known as the Amazon. It is 3,500 miles in extent, and so level is its course that throughout two-thirds of its length the channel slopes little more than 200 feet. It is wider and deeper than any other river in the world. Although the surface is placid, showing little apparent current, the average depth is from 75 to 150 feet, and in some places it has a depth of 250 feet; the width varies from a mile and a half at Tapatinga, on the Peruvian border of Brazil, to 4 miles at the mouth of the Madeira, and, again, to less than a mile as it passes the "narrows" at Obydos. So great is the conflict between the current of the river at its mouth and the incoming tide of the ocean that great billows, from 10 to 15 feet high, surge in at the northern entrance especially, following each other with deafening noise, particularly during the time of the equinoctial gales, when the current is strongest. This tide from the sea is perceptible as far up the river as Obydos, about 500 miles.

Throughout the lower course of the river are innumerable channels forming islands close to the shore, which during the dry seasons are the favorite haunts of the beau-

tiful herons and other birds native to this region; these low-lying lands are called varzeas, or flood plains, and they disappear during the rainy season, when the tides are high. The principal rise of the tide takes place in February on the Solimoes, in April on the Amazon proper, and in June on the Para. The level then falls until October, when a second rise of less importance begins, which lasts until January. These annual rises correspond with the rainy seasons of the regions watered by the great river and its tributaries. During the rainy season on the upper Amazon the tide sometimes rises to a height of from 40 to 50 feet, submerging the forests and converting a vast territory into an inland sea.

The Amazon Basin receives more rain during the year than any other region of the same extent on the globe, and the volume of water it carries to the ocean is estimated at the enormous rate of 100,000 cubic meters per second, the water of the great stream coloring the Atlantic for hundreds of miles from its mouth. The dull, opaque yellow of the main stream is tinged with various mixtures as it receives its immense tributaries, of which there are a dozen, that extend over a course of more than a thousand miles; the largest of these enter the river from the south—such as the Tocantins, Xingu, and Tapajos, in the State of Para—and the Madeira is the greatest southern tributary, having a length of more than 2,000 miles from its headwaters, in Bolivia—one branch rising near the border of Chile and the other close to the Argentine boundary. Of the northern tributaries, the Rio Negro is the largest and most important, having a length of more than 1,500 miles and an average breadth of nearly 2 miles for the first half of its course and of from 10 to 15 miles for the remainder, which is channeled with islands. The name of this river, which takes its rise in the mountains of Colombia, is singularly appropriate, the water having a rich chocolate color, which is not changed even at the confluence of the Rio Branco, whose milk-white tide is quickly lost in the greater current. The water is light golden when placed in a white vessel, and has a delightfully satiny feeling, which makes bathing in it an especial luxury and overcomes any prejudice against its color, that, though decided, does not interfere with its most perfect transparency. The Rio Negro constitutes the chief highway of commerce between Brazil, Venezuela, and Guiana. The second in importance of the Amazon's northern tributaries is the Japura, a thousand miles long.

Taos, an ancient American capital, by Agnes C. Laut, in the February number of *Travel*, is the first of a series of articles which will appear in this publication during the next few months, dealing with the great Southwest. Miss Laut has the happy faculty of imparting valuable information in a bright, cheery, and interesting way which almost charms the reader into the belief that he is reading fiction instead of fact—romance instead of history. Here is the way she introduces her readers to romantic old Taos:

As Quebec is the shrine of historical pilgrims in the North, and Salem in New England, so Taos is the mecca of students of history and lovers of art in the Southwest. Here came the Spanish knights mounted and in armor plate half a century before the landing of the Pilgrims on Plymouth Rock. They had not only crossed the sea, but had traversed the desert from old Mexico for 900 miles over burning sands, amid wild, bare mountains, across rivers where horses and riders swamped in the quicksands. To Taos came Franciscan padres long before Champlain had built stockades at Port Royal or Quebec. Just as the Jesuits won the wilderness of the up-country by martyr blood, so the Franciscans attacked the strongholds of paganism amid the pueblos of the South. * * *

But Taos traditions date back further than the coming of the white man. Christians have their Christ, northern Indians their Hiawatha, and the pueblo peoples their

[illegible]

Bah-tah-ko, or grand cacique, who led their people from the ravages of the Apache and Navajo in the far West to the Promised Land of verdant plains and watered valleys below the mighty mountains at Taos. Montezuma was to the Southwest, not the Christ, but the Adam, the Moses, the Joseph. Casa Grande, in southern Arizona, was the Garden of Eden—the Place of the Morning Glow—but when war and pestilence and ravaging foe and drought drove the pueblos from their Garden of Eden, then Bah-tah-ko was the savior to lead them to the promised land at Taos. When did he live? The oldest man does not know. The pueblos had been at Taos thousands of years when the Spanish came in 1540; and it may be added, they live very much the same to-day at Taos as they did when the white man first came. The men wear store trousers instead of woven linen ones; and some wear sombrero hats instead of a red headband; and there are wagons instead of drags attached to a dog in



COURTESY OF TRAVEL

POTTERY WORKERS ON THE PLAZA.

Many kinds of pottery are made by these pueblo girls, who care little what ethnologists may say of them, and claim descent, not from the Indians, but from the Aztecs and Toltecs of the South. (Illustrating "Taos: An Ancient American Capital," in February Travel.)

shafts; but apart from these innovations, there is little difference at Taos between 1912 and 1540.

The author gives directions as to the best way to get to Taos, including a vivid description of the journey by stage from the little village of Servilleta to the old home of the Pueblos, concluding with the description of the Penitentes, a "people who in every characteristic belong to the twelfth century."

In the second of the series, which appears in the March Travel, the author gives a more detailed description of the old pueblo of Taos. She writes:

The public paper has good things to report. The adobe villages of Taos, Acoma, Zuni—the Three Mesas of the Tusayan Desert—all lie on hill-sides, or on the very crest of high acclivities. Taos is the exception among purely Indian pueblos. It lies in the lap of the valley among the mountains—two castellated five-story adobe structures, one on each side of a mountain stream. In other pueblo villages, while the houses may adjoin one another like the stone fronts of our big cities, they are not like beehive apartment houses. In Taos the houses are practically two huge communal dwellings, with each apartment assigned to a special clan or family. In all, some 700 people dwell in these two huge houses. How many rooms are there? Not less than an average of three to each family. Remnants of an ancient adobe wall surround the entire pueblo. A new whitewashed mission church stands in the center of the village; but you can still see the old mission church pitted with cannon ball and bullet, when Gen. Price shelled it in the uprisings of the pueblos after American occupation. Men wear "store" trousers and "store" hats. You see some modern wagons. Except for these, you are back in the days of Coronado in 1540. All the houses are entered only by ladders, that ascend to the roofs and can be drawn up—the pueblo way of bolting the door. The houses run up three, four, and five stories. They are adobe color outside—that is to say, a pinkish gray; and white-washed spotlessly inside. * * *.

Glance inside the houses! The upstairs portion is evidently the living room, for the fireplace is here and the pot is on. Off the living room are corn and meal bins; and you can see the metate or stone on which the corn is ground by the women as in the days of the Old Testament. Though there is a new mission church dating from the revolt in the forties, and an old mission church dating almost from Coronado in 1540, you can see from the roof dozens of *estufas*, or *kivas*, where the men are practicing for their dances and masked theatricals.

Interesting details of pueblo customs, their socialistic mode of living, the practice of the secret rites of Montezuma, and much valuable historical matter, added to the pictorial features of the articles, make them noteworthy additions to the literature of our great Southwest.

Our Trade in South America, by Waldon Fawcett, in the February number of *Business* (Detroit, Michigan), is a very thoughtful and analytical article dealing with the positive necessity for the extension of our commercial field, and the development of our trade with Latin America in particular. Mr. Fawcett writes:

The recent transition of the United States from an agricultural to an industrial country, in so far as our exports are concerned, has given to South America a tremendous new importance and significance as a market for American products. To be sure, there has been more or less agitation on the subject for years, but until the ambitions of a new commercial era supplied the spur, there was little heed given by practical business men to the fact that it was highly desirable for the Republics of the three Americas to be bound together by closer trade relations as well as closer social and political relations. * * *

The past few years, however, have witnessed a revolutionary change in the status of the United States as a factor in international trade. In reality the change came gradually enough, but the climax was sufficiently precipitate to startle many people who had not kept track of the shifting currents of development. For several decades each recurring census has shown a decreasing proportion of rural population. This could mean, of course, but one thing—that our commercial and industrial interests were developing greatly, but at some expense to our rural activities. And the inevitable

outcome has resulted. The past few seasons have indicated that even with bumper crops it is going to require nearly all the products of American soil to satisfy the American appetite. Some portion of nature's bounty—as exemplified, for instance, in our unequaled apples—will, of course, continue to be sent overseas, but the vital point is that food-stuffs have lost their old importance as our chief asset in the international game of barter and trade.

With the loss of this line of business in prospect, and in some measure, directly upon us, it was essential that America find some substitute to offer in exchange for her foreign purchases. The very condition which upset the old order of things has provided compensation in the new. Parallel with the increasing home consumption of agricultural products and the curtailment of the surplus to be sold abroad, has come a tremendous expansion of manufacturing in all lines. The extension of factory facilities, the economics of scientific management and standardization, and the surpassing ingenuity of American inventors have enabled American manufacturers to not only cope with all the demands of an expanding home market, but to accumulate heavy surplus stocks for sale abroad.

The problem of the period, then, has been to find a market for this newly created excess of industrial output, and it is in this quest that all old rules have gone by the board. In certain favored lines the conquest of American products has extended all around the world, but in the main the American manufacturer has found it advisable to seek out the points of least resistance. It has required no great lapse of time to show that Europe, which has bought so freely of our agricultural products, is, in the matter of manufactured products, a fiercely competitive field, where American manufacturers are, for certain obvious reasons, at a disadvantage. But, on the other hand, South America, which bought so sparingly of our grain and beef when we were overstocked, is in a receptive, if not actually a favorable, frame of mind with reference to our manufactured products.

The author gives suggestions as to methods of increasing the trade between the Latin-American countries and the United States, comments on the growth of tourist travel to South America, and deals with the characteristics of the Latin-American business men. He gives many good pointers to United States exporters and refers to the United States Department of Commerce and Labor, the Bureau of Trade Relations of the State Department, and the Pan American Union as conspicuous "intelligence offices" where aid and information may be had at little or no expense.

The South American is the name of a new publication the first number of which has just reached this reviewer's desk. It is published by The South American Publishing Co., is to be issued semi-monthly, and has Mr. Wing B. Allen as editor and manager. **THE BULLETIN** welcomes this new "Richmond" in the field of Latin-American journalism and wishes for it that full measure of success which, judging from its first issue, it will deserve. In speaking of the opening of the Panama Canal and the greater interest awakened in Latin America as a field for the extension of the foreign trade of the United States, the editor writes:

It is this popular interest that has created the field for this journal. It will be the province of this paper to afford Americans an intimate knowledge of South American affairs. It is intended to bring American investors, homeseekers, colonists, pros-

pectors, soldiers of fortune, and other classes in touch with the opportunities of to-day. It is intended to afford a medium through which South American business men may introduce themselves and their projects to those in this country whom they wish so earnestly to reach. It is one stupendous field, and possibly to cover it completely is too much to expect from any one medium. The publisher realizes this and knows that his efforts can not compare favorably with the task undertaken, yet without doubt something worthy will be the result. At first it will be impossible to do more than touch upon some of the prominent features of the South American situation, but as time goes on various departments will be organized and each feature enlarged to meet as nearly as possible the requirements of the case.

The first article, "Latin America as a field for United States capital and enterprise," is a reproduction of an article written some six years ago by Hon. John Barrett, the present Director General of the Pan American Union, which the editor states—

so exactly hits off a situation between the United States and Central and South American countries to-day that it is reproduced herewith without apology because of the date.

Other articles giving important facts and information about the countries dealt with are "Something about Brazil," "Something about Colombia," "What an American company has accomplished in ten years," and various short and pithy paragraphs arguent the agricultural and mineral production of Latin America. One page is devoted to statistics as to area, population, and general topography of the several Latin-American Republics, given in a convenient and very condensed form. The editor is to be congratulated upon the showing made in his first number.

The South, the Canal, and Pan America, is the title of an article in the January number of *Cotton* (Atlanta, Georgia), contributed by Director General John Barrett, of the Pan American Union. In dealing with Pan American commerce and the vital interest therein of the Southern States, Mr. Barrett writes:

Although the volume of our trade at the present time with Latin America is only a small part of our total foreign trade, there is no section of the world which offers greater opportunities for development in the future. It is peculiarly a market which will want much of what we manufacture and will supply to us, in turn, raw products which we can not produce ourselves. * * *

What, therefore, can be done to develop the buying capacity of Latin America through our purchasing from them their raw products will, in turn, react by greater sales from the United States to them of cotton goods directly or indirectly. We need the imports of raw products from those countries for our manufacturing plants and for our labor and our capital, and, when we import rubber or hides or their other natural products and manufacture them, we bring even greater returns to ourselves than to the countries from which these products originate.

The article is replete with facts and statistics showing the wonderful increase in the commerce of Latin America during the past decade.

BOOK NOTES

The American Mediterranean. By Stephen Bonsal. New York, Moffat, Yard & Co. 1912. 488 pages. Price, \$3.

Many thousands of people from all parts of the world are now voyaging to Panama. They are drawn principally from the United States and European countries, and their course lies through the "American Mediterranean," as Mr. Bonsal appropriately terms the Carribbean Sea, which, during the years to come, will no doubt become as popular as the European Mediterranean. Indeed, the Caribbean countries are so closely interwoven with American history that they furnish most entertaining subjects for description, comment, and story, and probably no one is better qualified to do justice to them than Mr. Bonsal, who has been visiting the Caribbean lands again and again for the last 20 years.

The book appropriately opens with the "yesterday—to-day—and to-morrow," to which subject the author devotes 30 pages. Then Cuba, "14 years after the war," receives a good deal of attention, followed by visits to and descriptions of Haiti, Venezuela, Colombia, Porto Rico, the English islands, the French islands, etc. Many pages are devoted to the opinions of the writer, which may or may not coincide with those of the reader, but when it is remembered that Mr. Bonsal, as an author, correspondent, and traveler, has been in close touch with the political developments of the field, his opinions deserve careful consideration.

Thirty pages are devoted to the "Conquest of the Isthmus." The closing chapter, on the "Unsufruct of the West Indies," deals with the commercial and industrial possibilities of the Caribbean section of the world. An appendix of 75 pages contains extracts from the texts of various documents, commercial statistics, and other interesting matter that would be useful for reference, especially by the serious traveler who is not only in quest of beautiful tropical lands, but who wishes to know the West Indies and judge of future possibilities from a commercial and industrial standpoint.

In view of the greatly increasing importance of all the countries bordering on the Caribbean Sea, especially with reference to the opening of the Panama Canal, it would seem absolutely necessary that every person who is interested in the problems of the Caribbean, the Panama Canal, and the future relations of the United States with the Latin American countries, should have this book in his library. It is particularly useful to the students of Pan American progress who are endeavoring to get a broad viewpoint of all the countries, conditions, and facts which have to do with the new political, economic, commercial, and social tendencies of the Western Hemisphere.

Hazell's Annual for 1913. A Record of Men and Movements of the Time. 600 pages, edited by Hammond Hall, with copious index. Hazell, Watson & Viney, (Ltd.), Long Acre, London. Price, 3 sh. 6 net.

"A hundred blue books boiled down into one red one" is a fitting description which has been applied to Hazell's Annual. But the new number of this old and valued companion is much more than a mere digest of valuable facts. Indispensable as it is to writer or politician, it appeals to a much wider public. The scientist, the sportsman, the artist, the photographer, and even the idler with no special tastes, if such an individual there be, will find matter of interest in this encyclopedic guide book to the times in which he lives.

Chile Mercantile Reports. By F. L. de A. C. S., Santiago, Chile. In the United States copies may be ordered from the American Exporter, 110 William Street, New York. Price, \$100.

This valuable book of mercantile reports on the merchandise of Chile occupies an important place. It gives ratings of over 500 firms in Chile and should prove of service to commercial organizations conducting a foreign trade with the business men of that country. It is planned to keep this book up to date constantly, by supplements issued every two months, giving details as to new firms listed, changes, and concerns that have liquidated. The book is not sold outright, but manufacturers and others interested may subscribe for the service of a copy, which service also entitles the holder to the privilege, without extra charge, of receiving, on request, more detailed reports on business concerns.

SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO MARCH 31, 1913.

	DATE	AGENCY
Alarm clocks and dollar watches.		
W.	Feb. 10	Do.
Tr.	Feb. 10	Do.
S.	Feb. 10	Do.
Agricultural conditions and agricultural machinery.		
A.	Feb. 10	Do.
Motorcycles: limited demand; duty.	do.	Do.
Coal.	Feb. 7	Do.
American capital invested in iron ore.	Feb. 11	Do.
Opportunities for correspondence schools.	Feb. 12	Do.
Trade and industrial notes: Bridges; customs receipts for January, 1913; construction work; whaling; pawnshops; operating expenses of Government railroads, 1912; flax fiber.		
COLOMBIA.		
List of commercial houses in consular district.	Feb. 1	A. A. Winslow, consul, Barranquilla.
Manufacture of chocolate.	Feb. 28	Graham H. Kemper, consul, Cartagena.
Cost of producing Cuban cane sugar.	Feb. 21	Henry P. Starrett, consul general, Habana.
Sugar crop in Cienfuegos district, 1913.	Mar. 12	M. Baehr, consul, Cienfuegos.
Market for tiles.	Jan. 1	Geo. A. Bucklin, consul general, Guatemala City.
Hardware imports.	Feb. 19	Do.
Paints.	Feb. 22	Do.
Do.	Feb. 22	Do.
Do.	Mar. 1	Do.
Expanded metal building materials.	Mar. 11	Do.

This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this institution.

Reports covered up to March 31, 1911. Continued.

Title.	Date.	Author.
HAITI.		
Chocolate, cocoa, candies, and confectionery.....	Mar. 17	L. W. Livingston, consul, Cape Haitien.
MEXICO.		
Maguey rope (fiber not grown).....	Mar. 7	Wilber T. Gracey, consul, Progreso.
List of municipalities of 5,000 and more inhabitants.....	Mar. 10	Arnold Shanklin, consul general, Mexico City.
Watches and clocks.....	Mar. 11	Claude R. Guyant, consul, Salina Cruz (acting as vice consul at Ensenada).
No market for laundry machinery.....	do.	Do.
Moving-picture business in Yucatan.....	Mar. 12	Wilber T. Gracey, consul, Progreso.
Chocolate, cocoa, candies, and confectionery.....	Mar. 17	Marion Letcher, consul, Chihuahua.
PARAGUAY.		
No market for whalebone.....	Jan. 25	Corneilus Ferris, consul, Asuncion.
Market for lumber and timber.....	Jan. 28	Do.
Opportunities for correspondence schools.....	Feb. 12	Do.
PERU.		
Expropriation of Lima's Water Co.....	Feb. 24	James G. Drexler, vice consul, Callao.
VENEZUELA.		
Canned and dried fruit.....	Feb. 8	F. W. Voetter, consul, La Guayra.
Agricultural conditions and agricultural machinery.....	Feb. 11	Do.
Salt-paper and heavy cloth, duty.....	Feb. 12	Do.
Children's carriages; little market.....	do.	Do.
Hardware.....	do.	Do.
Cigarettes.....	Feb. 21	Do.
Gasoline lighting apparatus.....	Feb. 22	Do.
Market for American railway equipment and supplies.....	Mar. 8	Do.



ARGENTINE REPUBLIC

The public works committee of the Chamber of Deputies of the Argentine Republic has recommended the plan approved by the Senate for the AMALGAMATION OF THE SOUTHERN AND WESTERN RAILWAY COMPANIES, which provides that these two companies are authorized to form a new company under the name of the Argentine Southern & Western Railway Co. (Ltd.), with a capital equal to the total amount of the capital of both companies. The new company proposes to construct 5,315 kilometers (about 3,320 miles) of railways for the purpose of facilitating traffic to the different ports tributary to the line. A deposit of 300,000 pesos, national currency (peso paper=44 cents, United States) is required of the company as a guaranty for the faithful performance of the contract. The plan is subject to the approval of the chamber of deputies and of the President, both of whom are reported by the press to be favorable to the arrangement.—The amount invested in English railways in the Argentine Republic represents, in round numbers, £200,000,000. The reserve funds of eight of the principal companies amount to over £6,500,000.—The EDUCATIONAL CONGRESS which met in Cordoba on February 9, last, was composed of 42 delegates from the different institutions of learning of the Republic.—The town of ROSARIO, which was founded in 1725 and which, in 1763, had only 250 inhabitants, now has a population of more than 220,000 and an annual foreign commerce of over \$100,000,000. The CUSTOMS REVENUES of the Argentine Government in 1912, according to statistics published in the press of Buenos Aires, amounted to \$14,757,018.35, national currency.—The department of NATIONAL HYGIENE of the Argentine Government has recommended the construction of the following works in the Province of Jujuy: Sewering of the town of Jujuy; canalization, drainage, and paving at Perico; canalization, drainage, and supplying of potable water at Carmen, and drainage of San Antonio, Ledesma, San Pedro, and Mendieta.—The department of agriculture has established an experiment station at Tucuman for the cultivation of YERBA MATE (Paraguayan tea plants). The first shipment of 2,000 plants recently arrived. The work is under the immediate direction of E. Liniholmberg and Dr. Julio Lopez.—An extensive plan has been mapped out by the department of public works for the embellishment of the WATER FRONT between the city of Buenos Aires and El Tigre. The plans comprise the construction of an avenue 17 kilometers long.—According to La Prensa, of Buenos Aires, the FOREIGN TRADE of the Argentine

Republic in 1912 amounted to \$65,244,725 Argentine gold pesos, of which \$384,853,469 were imports and \$480,391,256 were exports. The total foreign trade of 1912, as compared with 1911, showed an increase of \$173,736,501 gold pesos, or over 25 per cent. The imports in 1912, as compared with 1911, showed an increase of 4.9 per cent, and the exports an increase of 47.9 per cent. The value of imports subject to duty in 1912 was \$292,278,465, and the value of imports not subject to duty was \$92,575,004. The imports of bullion in 1912 amounted to \$36,077,897, and the exports of bullion represented a value of \$585,621. In 1903 the total foreign trade of the Republic was \$352,191,124 gold pesos, as compared with \$865,244,725 in 1912, or an increase in 10 years of 145 per cent. — Rapid communication has been established on the **BERMEJO RIVER** between kilometer 600 and Port Bermejo, a Government vessel having recently easily traversed this distance in three days. — The **Second INTERNATIONAL CONGRESS OF COMMERCE AND INDUSTRY** of the Argentine Republic convened in Mendoza on April 6, 1913, pursuant to a resolution of the first congress, which was held in Rosario. Dr. Juan E. Seru was president of the congress. The principal topics treated were as follows: Transportation, industries, bankruptcy, credits, chambers of commerce, patents, and legislation. — The cultivation of **SAFFRON** is a new industry which it is thought could be profitably introduced into certain parts of the Argentine Republic. The imports of saffron in 1911 were valued at about \$300,000. This plant is cultivated in Europe under conditions similar to those existing in parts of the Argentine Republic, and recent investigations seem to establish the fact that it may be profitably grown in Argentina. The **EXPORTS OF CEREALS** from the port of Bahia Blanca in January, last, amounted, in round numbers, to 200,000 tons. The regional agricultural engineer has established the following cooperative **EXPERIMENTAL FARMS**: In the Province of San Juan: at Chimbaz, in charge of Sr. Juevenal de Oro; at Concepcion, Dr. Pedro Manrique; at Alto de Sierra, Engineer R. Wilkinson; at Angaco Norte, Dr. Daniel Aubone; at Santa Lucia, Sr. Salvador Ramirez; at Caucete, Sr. Ricardo Alvarez; and at 25 de Mayo, Sr. Ramon Echeagaray. — The director of the division of national territories has requested from the ministry of agriculture 10,000 hectares of land for the **FUEGIAN INDIANS**, with the view of preventing their total disappearance. — The minister of public works has authorized the *Compañía General de la provincia de Buenos Aires* to definitely open to public service its line from Marcos Paz to General Villegas, the construction of which was granted by law 4417.

The new line of the Central Argentine Railway from Cordoba to Alta Gracia has been inaugurated, the journey between the two

places only taking 45 minutes. This new line should give considerable impulse to that well-known holiday resort, which is sure to be made use of by the inhabitants of Cordoba.

The State line from Dean Funes to Laguna Paiva has been definitely opened to traffic, to the general satisfaction of residents in the zone through which it passes.

The minister of public works has approved the contract with the Pacific Railway Co. for constructing an industrial branch from Monte Coman station to near to the left bank of the River Atual, this branch to be constructed in accordance with laws 5703 and 6369.

BOLIVIA

The BUDGET of the Government of Bolivia for 1913 is estimated at 22,159,308.65 bolivianos and the revenues at 22,073,500 bolivianos. The estimated items of the budget, in bolivianos, are as follows: Legislative department, 497,572; foreign relations and worship, 1,080,344; treasury, 3,945,011.31; Government and fomento, 6,283,242; justice and industry, 1,775,203; public instruction and agriculture, 2,603,822.30; and war and colonization 5,974,114.04. The receipts of the departmental budgets are estimated at 2,586,414.63 bolivianos as follows: Chuquisaca, 198,644; La Paz, 948,700; Cochabamba, 420,000; Potosi, 460,615.89; Oruro, 158,310.54; Tarija, 128,900; Santa Cruz, 105,004; and Beni, 166,240.20. The expenditures for the departments are estimated at the same figures as the receipts.

—The new BOLIVIAN GUN, invented by Maj. Victor Ibanez, a native Bolivian and officer in the Federal army, is being manufactured in the shops of the war department in Bolivia. The tests made with this gun in the Bolivian Army up to the present time have been most satisfactory. —Sr. Adolfo Ballivian, consul general of Bolivia in New York, advises that the EXPORTS from the port of New York consigned to Bolivia during the month of February, 1913, consisted of 5,863 packages of merchandise, weighing 371,097 kilos, valued at \$79,657.97. This merchandise was made up principally of cotton goods, hardware, machinery, drugs and medicines, petroleum, and sundry articles, and was nearly all imported via the ports of Mollendo, Antofagasta and Arica, a small quantity coming through Brazilian and Argentine ports via Para, Rosario, and Buenos Aires. —The Republic of Bolivia at the present time is one of the most promising MANUFACTURING FIELDS in Latin America. The exports of Bolivia, made up largely of tin and rubber, for a number of years have exceeded the imports. Wherever the manufacture

of articles has been undertaken for which there is a demand in Bolivia excellent results have been obtained, and as the Republic is rapidly developing its immense resources, an increasing demand for manufactured goods is noted from year to year. In some instances the raw material is at hand for operating manufacturing plants, and labor, generally speaking, is plentiful, efficient, and cheap. The building of railroads and the bettering of transportation facilities in many parts of the Republic has also stimulated manufacturing and increased the consumption of manufactured goods, and especially of staple articles made in the country. The manufacturing industry is as yet in its infancy, but conditions for the development of this branch of industry are growing better from year to year, and it is confidently predicted that capital wisely invested in manufacturing in Bolivia will meet with profitable returns.—The board of directors of the NATIONAL BANK OF BOLIVIA at La Paz has appointed Sr. Enrique Urquidi, formerly in charge of the branch bank at Sucre, manager of the bank at La Paz, to take the place of Sr. Zenon Zamora, deceased. Sr. Waldemar Lehmann, formerly in the banking business at Oruro, has been made manager of the German Transatlantic Bank at La Paz.

In the table below are given the mineral exports of Bolivia for the last three years. The figures for 1912 have been secured in advance of official publication from the Bolivian Statistical Office, through the courtesy of Sr. Don Ignacio Calderón, Bolivian minister to the United States.

	1910		1911		1912	
	Weight (metric tons of 2,204.6 pounds).	Value (bolivianos).	Weight (metric tons of 2,204.6 pounds).	Value (bolivianos).	Weight (metric tons of 2,204.6 pounds).	Value (bolivianos).
Tin barilla.....	38,548	37,006,503.94	37,073	52,639,603.36	38,379	59,870,766.27
Silver, in bars.....		5,264,440.87		4,587,745.55		4,310,294.35
Silver, coined.....		5,501.45		791,507.85		
Copper barilla.....	3,191	1,786,952.18	2,950	1,426,942.70	4,681	3,370,589.05
Copper, untreated.....	16	1,140.00			377	32,046.40
Bismuth barilla.....	214	1,923,417.00	415	2,106,162.45	382	2,015,895.66
Bismuth, untreated.....	49	43,178.00	141	111,888.80	68	74,623.96
Zinc.....	11,797	435,008.90	9,798	372,490.00	9,010	332,245.00
Wolfram.....	210	141,629.31	297	231,187.90	472	295,235.31
Gold, in bars.....						144,275.00
Gold ore.....				94,906.60		
Gold coin.....		7,187.50				
Lead.....	30	700.00	340	23,546.25	766	78,626.90
Magnetic iron.....	3	973.54	331	74,229.93	98	8,642.38
Antimony.....		97,080.00		68,418.78		5,127.50
Mercury.....				2,400.00		
Miscellaneous.....		3,061.61		980.00		7,485.70
Total.....		46,716,774.30		62,532,010.17		70,545,853.48
Value, in United States gold.....		\$18,219,530.27		\$24,387,483.96		\$27,512,882.85

BRAZIL

Bids for the establishment of RUBBER REFINERIES AND FACTORIES for the manufacture of rubber goods in the Republic of Brazil have been submitted to a committee appointed by the secretary of agriculture of that country. The chairman of the committee, Raymundo Pereira da Silva, reports the receipt of proposals for the establishment in the following places of the industries referred to: Refineries in Para, Manaus, Minas Geraes, and Sao Paulo, and factories of rubber goods in Belem, State of Para, and the Federal district. The committee recommended the following bidders as possessing the technical, professional, and financial skill and standing necessary for doing the work required: The Goodyear Tire & Rubber Co., Dr. Adolfo Morales de los Rios, Dr. J. D. Leite de Castro, Companhia Norte do Brazil, Gabriel Chauffour, Arthur Haas, and Dr. Luiz Cantanhede. Advices from Rio de Janeiro state that the Brazilian Government has awarded to the Goodyear Tire & Rubber Co. the erection and establishment of a complete rubber manufacturing plant in the capital of the Republic and the erection of a rubber washing plant in the city of Manaus, on the Amazon. These contracts will probably require the purchase of a large quantity of machinery and building material abroad.—The departments of agriculture and of war of the Government of Brazil are cooperating for the improvement of the NATIVE HORSES of the Republic with the object of forming a specially hardy breed suitable for cavalry and other military uses. Conditions for raising horses in many parts of Brazil are ideal, and a fine type of horse, suitable to the uses of the high table-lands, has been developed at the agricultural experiment station at Sao Paulo. Among the Brazilian States where the natural conditions for breeding horses are probably as good as they are in any part of the world may be mentioned Rio Grande do Sul, Santa Catharina, and Parana. There is no reason why horses of a special type could not be easily bred in Brazil, just as they have been in Argentina and Chile and as they were bred in Texas and on Great American Plains of the United States 20 or 30 years ago. The experiment is an interesting one, and will doubtless, if proper methods are followed, cause the evolution of a Brazilian type of horse especially adapted to the needs of the military service of that country.—A recent presidential decree authorizes the SOCIÉTÉ ANONYME DES ÉTABLISSEMENTS BLOCH, with a capital of \$900,000, to engage in business in Brazil. The main office of the company referred to is in Paris, France. The new concern will establish

branches in the principal commercial centers of the Republic, and proposes to operate on a large scale in the commercial field.—THE LLOYD BRASILEIRO STEAMSHIP CO. has been given an annual subsidy of \$600,600 for a period of 18 years, in addition to the subsidies of \$908,380 granted in the years 1906 and 1909.—The Rio São Paulo Navigation Co. has been authorized to establish a NAVIGATION SERVICE between Rio de Janeiro and Iguape in the State of São Paulo. A Government subsidy of \$16,000 per annum is given the company. The vessels engaged in this traffic must not exceed a draft of 12 feet or have a capacity of less than 250 tons of freight with accommodations for 24 first-class and 20 third-class passengers. Two round-trip voyages per month will be made with stops at Angra dos Reis, Paraty, Ubatuba, Caraguatatuba, São Sebastiao, Villa Bella, Santos, and Cananea.—The CONCORDIA CONTINENTAL SOCIETY has been founded in Rio de Janeiro for propaganda work among the nations of the South American Continent with the object of promoting commercial, social, and educational development. The society proposes to organize expositions and maintain exhibits of South American products in the capitals of the different countries. The headquarters of the organization is at Rio de Janeiro. The society contemplates the establishment of a South American library in which works of South American authors are to be collected, as well as the principal South American newspapers and magazines. The best works written in Spanish are to be translated into Portuguese, and notable literary productions of Brazilian writers will be translated into Spanish. The plan also comprehends the founding in Rio de Janeiro of a general information bureau relating to and for the special service of the South American countries. The society will invite the principal newspaper men, literary writers, and scientists to arrange for an exchange of lectures in the different countries. An illustrated magazine is to be established and edited in Portuguese and Spanish. Branch organizations of the Concordia Society have already been established in some of the South American Republics, the one in Asuncion, Paraguay, being under the direction of Dr. Cecilio Baez.—The Government of Brazil has arranged for the erection of a branch ASTRONOMICAL OBSERVATORY on the Island of Fernando N'Oronha. One of the special duties of this observatory will be to make observations concerning the time in accordance with the provisions of the international convention of Paris.—The chairman of the board of public health in Rio de Janeiro has arranged for the compilation of statistics concerning TUBERCULOSIS patients treated in the hospitals of the Federal capital. —The representatives of Brazil in the work being carried on at Montevideo by the FIFTH INTERNATIONAL COMMISSION OF JURISTS are Dr. Candido Oliveira and

Dr. Francisco Paulo Oliveira. — Press reports state that the Government of Brazil has contracted in the United States with a skilled and experienced METALLURGIST to study and report upon the rich ore deposits recently discovered in the Republic. — Mr. Silvino Gurgel Amaral has been appointed MINISTER OF BRAZIL near the GOVERNMENT OF PARAGUAY. — The Government of Brazil has authorized the construction of a RAILWAY between Santo Domingo and Boa Vista, State of Para. and Covoata, State of Maranhao. — On February 19 of the present year a decree was signed authorizing the construction of a RAILWAY along the coast from Rio de Janeiro to Porto Alegre.

CHILE

A recent message of the President of Chile concerning the exploitation of the MAGELLAN TERRITORY recommends that the two stock-raising companies which have hitherto been the principal developers and exploiters of this vast territory, and whose contract is about to expire, be given an additional lease for a period of 15 years upon the payment to the Government of Chile of an annual rental of 1 peso currency (22.3 cents United States currency) per hectare (hectare about $2\frac{1}{2}$ acres) for land used in the exploitation of the pastoral industry, the principal branch of which in the region referred to is the raising of sheep. The holdings of these companies are in that part of the Magellan Territory known as Tierra del Fuego and Grande Island. In order to encourage small capitalists to settle and develop this part of Chile, the President proposes that 200,000 hectares of land be reserved in the neighborhood of the holdings of the large companies and be made available on easy terms to settlers interested in sheep raising, for which a large part of southern Chile is particularly adapted. — The CUSTOMHOUSES of the Republic of Chile in 1912 produced revenues amounting to 147,821,122.28 Chilean gold pesos (gold peso = 36 $\frac{1}{2}$ cents United States currency), and 2,016,255.86 pesos currency, plus surtaxes amounting to 17,789,322.01 pesos, so that the total customs receipts in Chilean currency for 1912 were, in round numbers, 277,000,000 pesos currency, or about 22,000,000 pesos more than in 1911. Of the customs revenues in 1912 the port of Valparaiso produced 37,306,129 gold pesos and 29,849,149 paper pesos; Antofagasta 64,339,529 paper pesos; Valdivia 3,985,917 pesos paper, and Punta Arenas, 305,755 pesos paper. — THE BANK OF CHILE during the second half of 1912 paid a dividend of 9 per cent.

This bank has a paid-up capital of 40,000,000 pesos and a reserve fund of 22,000,000.—**DRY FARMING** is being introduced into some of the arid regions of Chile and is meeting with great success. Recommendations have recently been made to the department of agriculture to systematically aid in the introduction of this method of tilling the soil in different parts of the semiarid regions of Chile. There are large tracts of rich agricultural lands in the Republic that could be utilized to advantage in dry farming, thereby enormously increasing the productiveness of the country. —A Japanese capitalist has solicited permission from the Government of Chile to engage in the **FISHING INDUSTRY** in the maritime waters of the Republic, with Japanese and Chilean capital. The points at which it is proposed to establish the industry are Valparaiso, Arauco Bay, and Chiloe.—The proposed **NAVIGATION TREATY** with Italy provides for the establishment of a subventioned line of steamers to maintain vessels which will ply regularly between the two countries, trips to be made monthly, with stops only at Montevideo and Rio de Janeiro. The tariff rates are to be fixed by agreement of the two Governments, and each country is to subvention the steamship company to the amount of £20,000. The route will be through the Strait of Magellan, but may be changed via Panama after the completion of the Panama Canal.—Press reports from northern Chile state that a North American Syndicate has invested £300,000 in **COPPER MINING** properties at Chuquicamata in the northern part of the Republic. By recent purchases this syndicate is said to have acquired mines at San Luis, Flor del Bosque, and Aurelia representing an investment of £92,000. A number of other valuable copper properties have been acquired, and the syndicate proposes to employ about 14,000 men in the exploitation and development of the mines.—The **AGRICULTURAL NORMAL SCHOOL** (Quinta Normal de agricultura), at Santiago, is to be reorganized and its activities devoted entirely to agricultural subjects under rules and regulations to be issued by the Executive power. The agricultural schools at Chillan, Concepcion, and Cauquenes are to be reorganized, and 30,000 pesos has been appropriated for establishing a new agricultural school at Aconcagua.—An **AGRICULTURAL CONGRESS** is to be held in Concepcion during the latter part of October, 1913. An exposition of agricultural machinery and a stock show will take place in Concepcion at the same time.—A new **TELEGRAPH LINE**, over which the quotations of the boards of trade of Valparaiso and Santiago will be sent as preferred business, has been opened to traffic between the city of Valparaiso and the Federal capital. —The first shipment of **FLAX** grown in southern Chile, consisting of 29,000 kilos, was made from Puerto Montt, consigned to Antwerp, in January of the present

year. —The BUDGET for 1913 provides for estimated expenditures totaling 257,912,469.15 pesos paper, and 52,727,920.33 pesos gold. —A company has been organized with a capital of 2,000,000 pesos to exploit the Cautin PETROLEUM DEPOSITS. —The SUGAR REFINERY on Teja Island near Valdivia has contracted with a German expert to take charge of the new plant now being erected, which it is proposed to put in operation in April or May of the present year.



The BUDGET of the Republic of Colombia for the fiscal year 1913, according to a recent executive decree, amounts in receipts and expenditures, respectively, to \$14,070,652.27. The expenditures are made up of the following items: Department of Interior, \$3,457,661.54; foreign relations, \$274,626.99; finance, \$1,072,958.20; war, \$3,300,632.19; public instruction, \$782,509; treasury, \$4,013,220.14; and public works, \$1,169,044.21. In addition to the foregoing, \$2,582,850 is set aside for the net amount of the special public credit budget for 1913 for the issue of bonds of the public debt. —The Government of Colombia has been invited, through the United States Minister at Bogota, to participate in the INTERNATIONAL RIFLE MATCH to be held in Perry, Ohio. —The minister of public works has ordered surveys for the construction of a RAILWAY from the Pacific Ocean, via Pasto, to some desirable point on the Putumayo River, and a second railway from Cucuta or Port Villamizar to a port on the Magdalena River. —Official statistics show that 3,817 pupils, 2,022 of which are girls and 1,795 boys, out of 4,366 matriculates regularly attend the PUBLIC SCHOOLS of Bogota. —Early in February of the present year the first trials of the HYDROPLANE BOAT for the navigation of the Magdalena River took place with great success. —The Government of Colombia has accepted 8 SCHOLARSHIPS of the University of Santiago, offered to Colombian students by the Government of Chile. Four of these scholarships are in the school of agriculture, two in the pedagogic institute, one in the school of architecture, and one in the veterinary school. The students are to be selected by competitive examination on June 1 of the present year. —A decree of the department of war provides that imports of ARMS AND EXPLOSIVES by persons residing in Bogota can only be made after giving bond and obtaining the written permission of the director of the material of war, or if made by persons living outside of the Federal capital the same requisites are necessary from the chief political

authority at the residence of the petitioners.—The consul general of Colombia in New York has been authorized to contract in that city for a SHIP to ply between Puerto Colombia or Cartagena and the San Andres and Providencia Islands. The vessel will carry the mails and engage in such other service as may be thought desirable by the governor of the Archipelago.—An executive decree of February 22, 1913, provides rules and regulations for the exploitation of the MARITIME SALT WORKS of private parties on the Atlantic coast.—Dr. Aristides V. Gutierrez represented Colombia at the ZOOLOGIC CONGRESS held in Monaco in the latter part of March of the present year.—Arcesio Mejia has been exempted from the payment of duties for a period of five years on the machinery and equipment necessary for the establishment of a TANNING FACTORY.—PUBLIC SCHOOLS have been established for the purpose of teaching the indians in the Territory of Arauca.—An ELECTRIC LIGHT PLANT was recently inaugurated at Tunja, capital of the department of Boyaca.—NOTARIAL REGISTRATIONS in the city of Bogota in 1912 show that the transfers of real estate in the Federal capital numbered 2,143, valued at \$3,123,218.29; 87 firms were organized with a capital aggregating \$605,063.44; and private contracts were made to the number of 3,241 and of a value of \$3,378,008.72.—The municipal BUDGET of the city of Medellin for 1913 amounted to \$231,922.—The BOARD OF TRADE of Medellin has elected the following officers: Alejandro Villa Latorre, president; Emilio Duque, first vice president; Alberto Echavarria, second vice president, and Benjamin Moreno, secretary.—The EXPORTS OF COFFEE by the Antioquia Railway in 1912 amounted to 155,824 sacks, as compared with 100,341 sacks in 1911.—The municipality of Bucaramanga has decided to provide a TRAMWAY service in the city.—A COLONIZATION COMPANY with a capital of \$1,000,000, has been organized in Bogota to operate among the natives of the Upper Cauqueta River.

COSTA RICA

The municipality of Escazu has recently issued new rules and regulations governing the rates and distribution of water from the municipal WATERWORKS for domestic, industrial, and irrigation purposes. This municipality has an abundance of fine water for all the needs of the community and surrounding neighborhood, provided there is a minimum of waste in its application and distribution, and in order to utilize to the maximum the water at hand strict rules and regulations have been put in force concerning its

use. — The COLLEGE FOR GIRLS (Colegio Superior de Señoritas) in the Federal capital has issued nine free scholarships for the present year, distributed among the different Provinces of the Republic. This college is in a flourishing condition and is making its influence for good felt more and more each year throughout the country, and especially in those Provinces distant from the metropolis of the nation. Many of its graduates have become educators and writers, and the instruction it imparts to its pupils is of a useful and practical nature in the everyday walks of life. — The Government of Costa Rica has appointed Sr. Don Sergio Alvarado Matarrita CONSUL GENERAL at Paris, France, to take the place of Dr. Alberto Alvarez Cañas, deceased. — The municipality of San Jose has contracted with Warren Bros. Co., of Boston, for paving the streets of the city of San Jose with BITULITHIC PAVEMENT. The full text of the contract in Spanish is published in the Official Gazette of Costa Rica of February 7, 1913. The prices for excavating, paving, etc., are made in American gold. One hundred thousand square meters of bitulithic pavement is to be constructed in the city of San Jose within the next two years. The municipality will dispose of a bond issue for the purpose of raising money with which to pay for these improvements. — The Federal Government has granted a concession to Sr. Juan Alvarado Chaves for the use of 200 liters of water per second from the Rosales River for the purpose of generating electric power with which to run a dynamo for operating a sugar-cane mill and in the manufacture and refining of sugar. — The Salitral de Santa Ana is an agricultural center of Costa Rica containing about 1,400 inhabitants. The principal industries of the district are LUMBER AND SUGAR CANE, there being 14 sugar-cane mills in the vicinity and 2 sawmills. Considerable business is done in agricultural products, and a good primary school is maintained for the education of the children living in the community, and especially of the children of laborers working on the plantations and in the sawmills and lumber camps. — A North American botanist and scientist, Prof. Henry Spencer, is studying the FLORA of Costa Rica for the purpose of including his investigations in a textbook of botany which it is proposed to publish during the latter part of the present year. The Poas Volcano and vicinity is one of the regions specially examined by Prof. Spencer. — The city council of the town of Alajuela has under consideration the reconstruction and enlargement of the MARKET so that it will occupy a whole square, the construction of waterworks, and the building of a tramway to the town of Grecia. Alajuela is a busy industrial center, and is well supplied with fine shoe shops, tailoring establishments, stores, saddlery and leather manufactories, and mechanical and cabinet shops.

CUBA

An order has been issued by the Cuban Government allowing **CUSTOMS DUTIES** to be paid with bank checks instead of American money, as has been the invariable rule in the past. The order has been interpreted not to apply to the city of Habana, but to all other ports in the Republic. The effect of the order will be to greatly facilitate the transaction of business in the payment of customs duties. —La Lucha of Habana states that President Elect Menocal contemplates establishing a **SUGAR MILL** in the Province of Matanzas, and that the site for same will be chosen with the cooperation of R. B. Hawley, president of the Cuban American Sugar Co. —On February 24 nine new pavilions were inaugurated at “La Esperanza” **STATE SANITARIUM** for incipient tuberculosis at Arroyo Apolo. The sanitarium was started four years ago, has a beautiful and appropriate site, and is one of the best managed and equipped institutions of its kind in Latin America. The new pavilions each have six beds and are provided with the latest appliances. Connected with these new pavilions is a house for nurses, a large open-air dining hall, and a lounging room. —A movement has been started in Santiago de Cuba to erect a **MONUMENT** in that city in honor of the late Tomas Estrada Palma, the first president of the Republic of Cuba. A large fund is said to have been pledged for the purpose. —A. A. Tehobold, of Evanston, Illinois, is having an **ICE FACTORY** constructed at Nueva Gerona, Isle of Pines. The building will be of cement and brick, 30 by 60 feet. It is proposed to store enough ice to supply the Isle of Pines for a month. The installation is expected to be completed by the middle of April. —A presidential decree makes \$12,000 available for preparing the Jai Alai building in Habana for the **NATIONAL MUSEUM**. The inauguration of the museum has been set for April 12, 1913. —The consumption of **CIGARS AND CIGARETTES** in 1912 in some of the Provinces of the Republic of Cuba was as follows: Province of Santa Clara, 39,557,825 cigars and 4,723,971 boxes of cigarettes; Province of Matanzas, 13,886,450 cigars; Province of Pinar del Rio, 9,427,250 cigars; and the Province of Puerto Principe, 3,941,950 cigars. —The Cuban Government has been notified through the Cuban minister in Washington that **OFFICERS OF THE CUBAN ARMY** will be permitted to enter military schools of the United States. One of the schools selected for this purpose is that at Fort Leavenworth, Kansas. —A number of representatives of the **ASSOCIATION OF CUBAN ENGINEERS** sailed from Santiago de Cuba during the

latter part of March for Panama for the purpose of visiting and inspecting the Panama Canal. The excursion is in charge of the president of the association, Sr. Primelles. — The HERRERA STEAMSHIP CO., of Habana, is negotiating for the purchase of an additional steamer to engage in its rapidly growing trade with the United States. An examination has been made of the steamer *Finkow*, a vessel of 1,500 tons displacement, built in Scotland for the Hongkong Navigation Co., and formerly used in the traffic between England and Asia. — The commission which prepared the PATENT MEDICINE bill presented to the Cuban Congress has modified the article requiring that each patent medicine shall bear a label on which shall be printed the entire contents of the medicine, so that all that will be necessary is that the bottle or package contain the name of the product. The measure requires the approval of the Cuban Congress and promulgation by the President before becoming a law. — A recent executive decree offers the TELEPHONE PLANT of the city of Matanzas for sale to the highest bidder, all the rights and interests in the plant having passed into the hands of the Government through the expiration of the franchise under which it was operated by the local company. The Cuban Telephone Co. has the preference in acquiring the plant; that is to say, may raise or equal the highest bid when the bids are opened, and in this manner acquire the plant against all competitors.

DOMINICAN REPUBLIC

An Executive order of January 4, 1913, concerning FUNDS TO BE USED IN FURNISHING LEGATIONS, paying expenses and salaries of diplomatic and consular officers, provides that the expenses of said officials journeying to or returning from their respective posts, or when transferred from one post to another, shall be limited to one passage, plus one-half the amount of the same. When a new consular officer is appointed to the post of a retiring consular official, the salary of the office from the date of the appointment until the new incumbent takes possession belongs in equal parts to the incoming and retiring consuls. Diplomatic and consular officers appointed to posts where there is no office established or in operation shall not commence to receive their salaries until they take possession of their posts. Salaried consuls in Europe and the United States are allowed two months' annual leave, and those stationed in the West Indies one month's annual leave. The Secretary of State is

authorized to extend the time of the annual leave referred to if he deems advisable. The order mentioned in the foregoing became effective on February 1, 1913.—The **BOOT AND SHOE** manufacturing establishment of the Regal Shoe & Leather Co., at Santiago de Los Caballeros, Dominican Republic, is operating full time in order to keep up with its orders. This factory occupies a handsome building especially constructed for the purpose and is equipped with the latest and most up-to-date shoe machinery and appliances. Different grades of boots and shoes are made and a ready market is found for the output throughout the Republic.—A decree of the President of the Republic of January 22, 1913, issued in conformity with the law of July 17, 1912, provides for the formation of **TWO BATALLIONS** of the regular army consisting of four companies, the officers, in addition to the captains, consisting of 16 first lieutenants, 16 second lieutenants, 48 sergeants, 96 corporals, and 16 buglers. The pay of the soldiers is increased to \$20 a month.—Sr. Salvador Emilio Paradas has been appointed secretary of the **LEGATION** of the Dominican Republic at Berne, Switzerland, and Sr. Francisco Deetjen, consul general at New York to take the place of Sr. Juan B. Alfonseca C.—The President of the Dominican Republic has issued an order requiring that all **DOMINICAN FLAGS** used in the legations and consulates of the Republic shall be $2\frac{1}{2}$ meters long by $1\frac{1}{4}$ meters wide, with colors and coat of arms arranged in conformity with articles 99 and 100 of the Federal constitution. Articles 98, 99, and 100 of the constitution of the Dominican Republic are as follows: "Article 98. The flag of the Republic shall be divided into four quarters, two blue and two red, those of the same color to be placed diagonally with each other, and divided in the center by a white cross of a width equal to half of either of the other colors, having in its center the coat of arms of the Republic." Paragraph. "The merchant flag shall be the same without the coat of arms." "Art. 99. The coat of arms of the Republic shall consist of a cross, having at its foot the book of the Gospel opened, the cross and the book coming out of a trophy in which the symbol of liberty is seen surrounded by a ribbon with the following legend: 'Dios, patria, y libertad.'" (God, country, and liberty.) "Art. 100. Oaths of office shall be required in all cases, under the constitution and the laws, and no public functionary shall enter into the discharge of his duties without said oath having been administered to him by competent authority."—Material for the construction of a new **THEATER** in the capital of the Dominican Republic has arrived at the port of Santo Domingo. Construction work under the direction of Engineer A. U. Jastad has begun. The theater will cost about \$100,000 and is expected to be completed

during the present year. — MINING PROPERTY said to be of considerable value has been denounced in the Province of Santo Domingo by F. A. Brea and J. B. Thorne, the former a Dominican and the latter a North American. The Official Gazette of February 8, 1913, contains the official publication of the denouncement and the boundaries of the property. — The INTERNATIONAL CONFERENCE held in Brussels in March, 1913, for the purpose of securing greater uniformity in the commercial statistics of the participating countries, was attended by Messrs. Joseph Penso and Emilio Guarini as representatives of the Dominican Republic. — A recent decree of the President of the Dominican Republic limits to \$300 the amount available for furniture in DOMINICAN CONSULATES.

ECUADOR

The press of Quito states that the MANTA TO SANTA ANA RAILWAY will be opened to public traffic on April 30, 1913. The concession under which this railway is being constructed was granted in November, 1909, with the stipulations that the survey and location should be completed by May 1, 1911. At the close of the month of January of the present year 42 kilometers of the railway, that is to say, the section from Manta to Portoviejo, had been opened to public traffic, a distance of only 14 kilometers remaining to be built to complete the road to Santa Ana, and considerable work on the unconstructed section had then been done. The building of the Santa Ana to Manta Railway has cost the nation nothing up to the present time, since under the terms of the concession no payment was to be made or obligation incurred by the Federal Government until the railway was completed and delivered to public traffic. The President of Ecuador will be present at the inauguration ceremonies on the 30th of the present month, and great preparations have been made for the celebration of the event. — The city council of Guayaquil has passed rules and regulations, consisting of 38 articles, governing the TRAFFIC OF VEHICLES, horses and street cars, within the incorporated limits of the port of Guayaquil. Violations of the rules and regulations referred to are punishable by fines, and the police are given authority to see that the regulations are duly enforced. — The "Tiempo" of Guayaquil states that the EXPORT TAX ON CACAO in recent years has amounted annually to about 4,000,000 sucres. The law of October 23, 1912, enacted for the purpose of raising the price of cacao abroad, imposes an additional tax of 1 sucre per quintal on exports of this product, the revenue from which is estimated at

800,000 sucres annually. Taking these figures as a basis the Government of Ecuador should receive from the export tax on cacao in 1913 and succeeding years not less than 4,800,000 sucres annually.—The French railway company at Bahia has obtained permission from the Government of Ecuador to deepen the BAY OF CARAQUEZ. A bond issue of 1,400,000 sucres, guaranteed by the Federal Government, is to be made for the purpose of raising funds with which to complete the dredging of the bay referred to.—The COMMERCE of Ecuador in 1911, according to figures published in No. 527 of "El Grito del Pueblo Ecuatoriano," consisted of 168,604,595 kilos of merchandise, valued at 55,599,052 sucres. This commerce was made up as follows: Imports, 91,534,591 kilos, valued at 23,240,133 sucres; exports, 65,037,824 kilos, valued at 26,115,714 sucres, and coastwise trade, 12,032,180 kilos, valued at 6,243,205 sucres. The foreign commerce for 1911 amounted to 49,355,847 sucres. The customs revenues in 1911 aggregated 13,095,823 sucres, of which 8,433,682 were from imports and 4,662,141 from exports.—The press of Guayaquil states that an AVIATION SCHOOL is to be established by the Federal Government at Quito. The school will probably be under the direction of the Ecuadorean aviator, Sr. Cosme Renella.—The recent inauguration of the WATERWORKS at Riobamba, under the direction of Engineer Ricardo Muller, was duly celebrated by the people of that city. According to reports the municipality of Riobamba has now an abundant supply of potable water. —A WEEKLY NEWS-PAPER entitled "El Trabajo," has been founded in Ambato. This periodical is advocating the erection of a monument in Merced Plaza in said city in honor of Juan Leon Mera, a distinguished Ecuadorean writer of Ambato.—An ENGLISH LANGUAGE CLUB has been established at Azuay. Dr. Rafael M. Arizaga and Sr. Federico Malo are among the most active members of the new organization.—The Government of Ecuador has contracted with a foreign engineer for the construction of the Azuay section of the NATIONAL HIGHWAY from Cuenca to Huigra.—The BANK OF PICHINCHA in Quito, at the close of December 31, 1912, had assets amounting to 4,050,096 sucres and cash on hand aggregating 853,287 sucres gold and 75,865 sucres paper. This bank has recently made a substantial increase in the amount of its working capital. —The following amounts are appropriated in the federal budget for the UNIVERSITIES OF THE REPUBLIC: Central, 140,538 sucres; Guayas, 91,657 sucres; Azuay, 55,101 sucres, and Loja, 7,612 sucres.—Guayaquil is to have a new municipal building, for the construction of which bids were opened on February 3. According to plans and specification it is to be a 2-story reenforced concrete structure, to cost approximately \$240,000 United States currency.

GUATEMALA

According to the message dated March 1, 1913, of Sr. Don Manuel Estrada Cabrera, President of Guatemala, to the National Legislative Assembly, the value of Guatemalan imports for the year 1912 amounted to \$9,822,462. The imports for the preceding year were \$6,514,421. The figures contained in the message of Sr. Estrada Cabrera show an increase in imports for the year amounting to \$3,308,041. No details of imports are given.

The exports of seven of the principal products, according to the message, amounted in 1912 to \$12,601,969, which figures exceed in value the exports of these and all other products for the preceeding year by over \$1,620,000, and exceeds in value the exports of these products alone by \$2,139,534. The following table gives the exports by the articles referred to for the two years:

	Weight.		Value.	
	1911	1912	1911	1912
Coffee, clean.....	30,345 tons.....	30,418 tons.....	\$7,282,749	\$9,125,625
Coffee in parchment..	10,480 tons.....	7,165 tons.....	1,991,161	1,862,881
Sugar.....	15,734 tons.....	4,655 tons.....	1,344,015	243,302
Panela.....		5,354 tons.....		321,230
Rubber.....	160 tons.....	131 tons.....	159,621	140,768
Woods.....	3,163,563 cubic feet....	8,468 logs.....	158,178	241,472
Bananas.....	50,228 tons.....	2,222,304 bunches..	526,711	666,691
Total.....			10,462,435	12,601,969
Total exports.....			10,981,724	

† Includes panela.

The COLLEGE OF AGRICULTURE of the Republic of Guatemala, at Guatemala City, which was founded by President Estrada Cabrera on January 13, 1913, has admitted in its first year's classes the first year pupils of the Central Normal School for Males, thereby largely increasing the number of students taking the agricultural course. The President of the Republic has shown great interest in the welfare of the school of agriculture, and has materially aided in the systematic development, on scientific lines, of this school. From henceforth the influence of the school of agriculture will be a prominent factor in the development of the immense and varied agricultural resources of the country. —The Government of Guatemala has contracted with William C. Groom for estimates, plans, construction, and installation of a WIRELESS TELEGRAPH TOWER in the Federal capital within the next few months. The contractor, who is paid by the month for his services, agrees to teach the persons selected by the Government the operation of the tower, which is to be of sufficient height to enable communications to be sent and received with the other wireless telegraph installations of the Republic. The material for the con-

struction of the tower, the apparatus, etc., will be bought in the United States. —An executive decree of February 15, 1913, imposes a tax of \$10 United States gold on each rifle or gun, and \$8 United States gold on each revolver brought into the Republic through the ports of San Jose, Champerico, Ocos, Livingston, Puerto Barrios, Izabel, Puerto Estrada Cabrera, and Panzos, the amount of the tax to go into the municipal treasuries of the cities through which the importations are made. FIREARMS for the army, which the Government has the exclusive right to import, are excepted from the tax referred to. Immigrants and tourists who do not wish to pay the tax on firearms on entering the Republic, may deposit the weapons in the custom-houses of the ports of entry and recover them on leaving the country, but should one year elapse before said weapons are called for by their owners, they then become the property of the municipality in which they were left on deposit. —The Department of El Progreso has 46 PRIMARY SCHOOLS, 16 of which are for boys, 9 for girls, and 21 mixed. The total enrollment at these schools is 1,664, of which 897 are boys and 767 girls. Recently a school of vocal music was established at El Progreso with an attendance of 21 scholars. —The American and Guatemalan MAHOGANY CO., a corporation organized under the laws of the State of New Jersey, has been authorized by the Government of Guatemala to do business in the Republic upon the payment of the annual tax of 1,000 pesos prescribed by the laws of the country. —The Government of Guatemala has adopted the British rules and regulations for preventing collisions at sea, and has accepted the modifications to the rules issued by the Congress of the United States on August 19, 1890. These rules and regulations refer to lights, signals, speed of vessels during fogs, navigation rules, risk of collisions, distress signals, etc. The full Spanish text of the rules and regulations referred to are published in "El Guatemalteco," the official organ of the Republic of Guatemala, of February 10, 1913. —At the close of 1912 there were 8 registered translators authorized by the Government to make translations in the Republic of Guatemala in the English, French, German, Italian, and Spanish languages. A complete list of these translators with the respective dates of their registrations is published in "El Guatemalteco" of February 20, 1913. —Sr. Roberto Fernandez y del Valle has been appointed consul of Guatemala at Guadalajara, Mexico, in place of Sr. Justo Fernandez del Valle y Alyarez, deceased. —The Government of Guatemala has appointed the following delegates to represent it at international congresses: Sr. Jose Maria Lardizabal at the International Conference of Commercial Statistics at Brussels; Sr. Julio Marsily, at the Fourth International Congress of Sanitation and Hygiene at Antwerp; and Sr. Juan Van de Putte at the Third International Congress of Agriculture to be held in Ghent, and also at the International Congress of Domestic Science at Ghent.

HAITI

In order to remedy the unsanitary condition of the streets of Port au Prince, President Tanerède Auguste issued a decree on February 11 authorizing the Government to advance to the city of Port au Prince, not counting the appropriation granted by Congress, a sum of \$6,000 to be used in furnishing the material necessary for cleaning, watering, and repairing the streets of the city and 26,000 gourdes to make up the deficit in the receipts set aside for this purpose. The \$6,000 will be immediately available, and the 26,000 gourdes will be paid in advance in eight monthly payments up to the end of the fiscal year ending in October. — The secretary of public works officially accepted on January 23, 1913, section 16 of the railroad line from Gonaïves to Ennery, a distance of 33 kilometers and authorized that it be immediately opened to public traffic. This line was built for the Haitian Government by the National Railroad Co. of Haiti, and, according to the inventory furnished by the company, consists of 33 kilometers of road with pipes, etc., necessary for draining the roadway, two bridges, one depot at Gonaïves, stations at Gonaïves, Passe-Reine, and Ennery, and a machine shop at Gonaïves, equipped with the necessary material for repairs. The rolling stock consists of 2 Baldwin locomotives and tenders of 15 tons and 30 tons, respectively, of 1 passenger car of first class, 1 passenger car with railway mail and baggage car, 1 second-class passenger car and 2 third class passenger cars, 2 box cars, 2 cattle cars, and 2 flat cars. The Government agrees to accept this line and hand over to the company the bonds, duly signed, on condition that it rebuilds the line at kilometer 32.2 according to the specifications of the Government engineer, by lowering the level of the ground near the arch support of the bridge at Ennery and by protecting this support with a cement wall. — An automobile company has been organized in Port au Prince under the name of *Compagnie des Transports Automobiles*.

HONDURAS

The ATLANTIDA BANK, at La Cera, Honduras, opened its doors for business in February last. The authorized capital of this institution is \$5,000,000 United States gold, \$4,000,000 of which have been subscribed, and \$250,000 paid in. The following are the officers of the bank: Sr. Cecilio D'Astouin, president, Gen. Juan Rios Rivera, vice president, and Sr. René Lavallée, cashier. The other

members of the board of directors are: Messrs. Emilio Dutu, Vicente D'Antonio, and Juan Plauche.—The MUNICIPAL REVENUES of the Republic of Honduras during the fiscal year 1911-12 amounted to 1,271,553 pesos and the municipal expenditures to 869,937 pesos. The four departments producing the greatest amount of revenue were, in the order of their importance, as follows: Cortes, 214,550 pesos; Atlantida, 198,168; Tegucigalpa, 162,159, and Copan, 123,582.—The preliminary survey of the TRUJILLO TO JUTICALPA RAILWAY was completed during the latter part of last March. The proposed route of this railway, after crossing the Aguan River, follows along the Valley of the Bonito River in the direction of Iruña and continues from that place upstream to the Sico Valley. Under the terms of the concession the Government has three months in which to give its approval of the survey. As soon as the Government approves the survey, work will be commenced on the first section of 26 miles from the Trujillo River to Aguan. The completion of this railway will greatly stimulate development of a large district of the richly wooded agricultural section of the Republic. Among the requests for lands recently made along the line of this road are those of three Texas stockmen particularly interested in raising cattle and mules on a large scale. The construction company is said to have obtained French capital for the building of the railway and for the development of the lands granted it along the route of the line.—The CITY OF LA PAZ, Honduras, situated in the department of the same name in the western part of the Comayagua Valley, has a population of 4,000 inhabitants. The town is built on both sides of Mura Creek and lies at the foot of Los Manueles Peak. This town is one of the oldest in the Republic, having been founded a short distance from its present site under the name of Las Joachinas in 1791. The region is an agricultural section, but rich silver and gold ores are found in the mines of the neighboring mountains. The Chanton Mining Co. exploits a gold property in the vicinity, and a nitrate deposit is being worked in the neighborhood.—Jose Rössner, a German subject resident in Tegucigalpa, has been authorized by the Federal Government, subject to the approval of the Honduran Congress, to found an issue and discount BANK in the Federal capital under the name of "Banco Agricola Comercial" (Agricultural Commercial Bank). The new bank proposes to engage in the banking business generally, but will make a specialty of loaning money on real property. The capital is to be 2,000,000 pesos silver, represented by shares of 500 pesos each, but business is not to be commenced until one-half of the entire capital is paid up. Provision is made for an increase of the capital to 10,000,000 pesos, the department of finance to be advised of the time and amount of each increase. The bank proposes to issue bank notes of the denominations of 50 centavos,

1, 5, 10, 20, and 50 pesos each. Mortgage bonds will also be issued in amounts of 50, 100, 500, and 1,000 pesos each. The bank may also mint for its account fractional silver coin, proceeding in this respect in accordance with the laws of the country and under the immediate inspection of an agent of the Government. The concession is for a term of 50 years, and operations must be commenced within 12 months from the time of the approval of the by-laws of the institution by the Government.—The straw HAT FACTORY, operated under the direction of the Government of Honduras, at Juticalpa, in the Department of Olancha, is at present attended by 36 female students, who are learning the art of weaving, shaping, and manufacturing hats. The hats produced by this school vary in quality and value from the ordinary straw hats worn by agricultural laborers to hats of a fine web, texture, and quality.—George S. Colman and Albert G. Greeley have been given authority to exploit a GOLD MINING property known as "Mina Grande," located near Sitio del Paral, jurisdiction of the village of Salama, Department of Olancha. The concessionaires propose to begin the exploitation of this mine at once and to develop the same as rapidly as possible. Lic. Rafael Bustillo has been appointed by the President of the Republic of Honduras assistant director of the school for the cultivation of TOBACCO at Danli. This school has a considerable number of students, and under its influence the cultivation of tobacco in the Republic has greatly increased during the last few years.



The wonderful GRAPHITE MINES of the State of Sonora are about 20 miles from the mining town of La Colorada. These mines are the source of much of the graphite used in the manufacture of pencils the world over. A traveler describing the mines says that the graphite, on being brought to the surface, is spread out in the hot sun to dry, and then thrown into piles to await shipment. Mules haul it to La Colorada, whence it is forwarded to Michigan for treatment. After being ground it is exposed to a gentle blast of air. The heavy grit particles settle first and are separated from the small soot-like particles which remain. The graphite thus refined is mixed with clay in certain proportions for making pencils, a good deal of clay being used for hard pencil leads and less for soft pencils. The largest use of graphite is as a lubricant. It is employed extensively in the mixing of paints to give "body," and is used in electrotyping and the manufacture of stove polishes. — The official reports of the NATIONAL LIBRARY in the city of Mexico for 1912 show that 43,106 persons visited that

library during the year. The number of persons using the library during the day time were 28,752, and during the evening hours 14,324.

—A decree has been published in the "Diario Oficial" establishing a government SEISMOLOGICAL STATION at the Obispado Viejo property in the suburbs of Monterey, State of Nuevo Leon. The property is on a hill overlooking the city of Monterey and the location for the station is ideal.—During the last few years a great impetus has been given in the Republic of Mexico to the cultivation of FRUIT TREES, the vine, and small fruits. The bureau of agriculture of the Government of Mexico has aided and encouraged this development in every way possible, and has recently appointed a number of expert viticulturists and horticulturists as assistants to the department, so that persons engaged in this industry needing the services of experts can obtain same at a small cost.—The right to use the name of the NATIONAL AGRICULTURAL SOCIETY, of Colima, has been granted to the farmers of that State by the bureau of agriculture of Mexico. The by-laws of the organization have been approved by the department.—The SCHOOL OF ARTS AND CRAFTS for girls, which opened its courses in the City of Mexico in February last, had an enrollment of nearly a thousand pupils. The course of instruction has been extended by the addition of departments in lace making, umbrella manufacture, and gilding.—Work has begun in the City of Mexico on the CENTRO ASTURIANO HOSPITAL, which in future will be known as the Covadonga Sanitarium.—The RAILWAY between Zapotlan and Mexicaltzingo was inaugurated in March last with appropriate ceremonies, the President of the Republic having been invited to attend.—The department of war of the Mexican Government has arranged to send several students of the ASPIRANTES MILITARY SCHOOL to France to take up the study of aviation in that country.—The department of foreign affairs of the Mexican Government has announced the following changes in the consular service: Alejandro Ainslie has been appointed consul at Tucson, Arizona; Isaac Aceves, consul at Calexico, California; Tristan Garza Castellon has been appointed to the consulate in Phoenix, Arizona; Fernando Baz, consul at Eagle Pass, Texas; and Lic. Manuel Piña y Cuevas, consul at Los Angeles, California.—Frank F. Vaugh, an American citizen residing at Tetela de Ocampo, State of Puebla, has applied to the department of fomento of the Mexican Government for a concession to use 500 liters of water per second from the Isecahuasco River for generating power for a HYDROELECTRIC PLANT. The electric installation is desired to run a reduction plant for the Puebla Mining Co.—Gustavo Scheibe, of the City of Mexico, has applied for a concession to use 300 liters of water from the Quilate River in the district of Jacilingo, State of Jalisco, for IRRIGATION purposes.—

The Fuerte River Valley has produced a large crop of TOMATOES which became ready for shipment in January and February of the present year. Up to February 12 of the present year 131 carloads of tomatoes from this district had been shipped into the United States. The total crop is estimated at 500 carloads. This industry has been built up during the last three years. Onions, beans, and celery are also grown in large quantities.—In a recent article on the MINERAL PRODUCTION of Latin America the London Times states that for years Mexico has been the fifth largest gold-producing country in the world, the first in the production of silver, and the second in the production of copper. In 1912 the country produced gold to the amount of \$22,176,600, the silver amounted to 71,000,000 ounces, and the copper to 68,000 tons. — A recent consular report gives the following statistics relative to the remarkable development in Mexico of the PETROLEUM INDUSTRY. The output for the past six years has been, in 1907, 1,000,000 barrels; 1908, 3,481,410 barrels; 1909, 2,488,742 barrels; 1910, 3,332,807 barrels; 1911, 14,051,643 barrels; and in 1912, 16,500,000 barrels.

NICARAGUA

A recent issue of The American of Bluefields, Nicaragua, states that possibly the most important step which the Nicaraguan Government has taken in many months is the ratification by the Assembly of the WEITZEL CHAMORRO CONVENTION, lately approved without debate at its second reading by the Nicaraguan Constituent Assembly. By this convention the United States of America obtains the following: An option on the area comprehended in the former "Nicaraguan Canal" route and the attendant right to construct a canal; the leasing of the two Corn Islands and the Bay of Fonseca. The canal option is perpetual, while the lease of the islands and bay or gulf is for the term of 99 years. For the option and lease Nicaragua is to receive \$3,000,000, to be expended in the development of the country and the payment of the present indebtedness. — The Supreme Court of Nicaragua has appointed Dr. Daniel Morazan, DISTRICT JUDGE for Prinzapulea, and Mr. Rodolfo Correa, CRIMINAL JUDGE for the same district. — The following COIN for use on the Atlantic coast of the Republic has been received at Bluefields by the Bank of Nicaragua (Inc.): Half cent bronze, 900 córdobas; 1 cent bronze, 1,500; 5 cent nickel, 1,000; 10 cent silver, 5,000; 25 cent silver, 25,000; 50 cent silver, 60,000; córdobas, 20,000. The bank reports that the value of these coins, amounting to \$116,400 United States gold, has

been deposited with the United States Mortgage & Trust Co., of New York, to secure the circulation of the coins referred to, and that similar deposits will be made covering not only all the coin that will be sent to the country, but the paper córdovas as well. The monetary conversion is to become effective between March 23 and September 23, when it is thought all the old paper pesos will have been retired. —Press reports state that the BONANZA MINE in the Pis Pis district of Nicaragua has been sold to American and English capitalists. The Mars mine is also said to be included in the group. —Mr. A. De Julian, of Idaho, has been making investigations concerning the possibilities of profitable sugar-cane culture on the Atlantic coast of Nicaragua in the vicinity of the Escondido River. The results of his investigation prove that the cultivation of this crop on a large scale would undoubtedly be very profitable in the region referred to, inasmuch as the soil, climate, and transportation facilities are all favorable to the profitable development of the sugar-cane industry on the Atlantic coast of the Republic. —A party of Canadian capitalists, some of whom represented the Canadian Security & Sales Co., recently made an exploration trip up the Escondido River, and incidentally inspected the 1,000-acre fruit plantation of the Canadian Co. This company expects to start EXPORTING FRUIT direct to Canada in August next, and will build 5 miles of railway through their plantation to the Escondido River in order to facilitate the shipment of fruit. From what the party saw it was convinced that the banana business in Nicaragua offers fine inducements for the investment of capital. It is reported that the Canadian Security & Sales Co. proposes to enlarge its holdings in Nicaragua. —The National Constituent Assembly of Nicaragua has enacted the following law concerning GOVERNMENT PROPERTY: "Art. 1. No tribunal of the Republic can exact bonds, nor execute writs of embargo against the revenues, properties, or other interests of the State. In consequence the Government's properties embargoed by orders executed under the decree of May 17, 1912, can not be sold at public sale, under pain of nullity." "Art. 2. The tribunals competent to officiate in the matter of claims against the Public Treasury, in favor of private parties, shall give judgment, as to the rights of the parties, and may order the compliance thereto, in the event of having declared a sentence, but the compliance rests exclusively with the executive, who shall attend to any payment in the manner and within the limits prescribed by the law, according to the budget." —The bonds for the NATIONAL RENTS for 1913 will be of the \$250 denomination each and will bear three signatures, namely, the facsimilies of those of Don Aldolfo Diaz and Don Salvador Lezano, and the signature of Don Pedro Rafael Cuadra.



PANAMA

The National Assembly of the Republic of Panama has appropriated 30,000 balboas for the repair of barracks, purchase of materials, and for other necessary expenses required by the FIRE BRIGADES of the Republic in the cities of Panama, Colon, and Bocas del Toro, 15,000 balboas being apportioned to the city of Panama, 10,000 to Colon, and 5,000 to Bocas del Toro. — A law of January 15, 1913, imposes a duty of 2 balboas per quintal on imports of SALT. The same law authorizes the President of the Republic to reduce the duty on imported salt to 1 balboa per quintal whenever the salt produced in the Republic is not sufficient for local consumption or whenever it is not of an acceptable quality. — In January, 1913, President Porras, in a special message to Congress concerning the construction of a RAILWAY from Panama to David, with branches to the Province of Los Santos and to the village of Anton, recommended that the executive power be authorized to construct this railway administratively or by contract, expending such a sum as may be necessary for the completion of the work. The National Assembly has authorized the construction of the road, and the law has been duly signed and promulgated by the President of the Republic. The estimated cost of construction will be over 10,000,000 balboas.—Dr. Ramon Valdez, minister of Panama at Washington, has notified the Government of Panama of the appointment of Dr. L. S. Rowe and Mr. Roland Falkner, as representatives of the Government of the United States on the JOINT COMMISSION that will appraise the value of private lands in the Canal Zone required by the Canal Commission. The representatives of the Government of Panama on the commission are Mr. F. Boyd and Mr. S. Lewis. The commission will act under Articles VI and XV of the treaty of February 26, 1904, between the United States and Panama. The first commission on lands made its report in August, 1908. It is expected that the work of the present commission will cover at least six months. The Government of Panama has placed at the disposal of the commission the presidential chamber in the Government palace where the conferences of the commission will be held.—A law has been passed by the Congress of Panama and duly signed and promulgated by the President of the Republic imposing a duty of 0.40 of a balboa per kilogram on SOLE LEATHER imported into the country after March 2, 1913. If sole leather is imported cut in pieces for shoes, or in strips, or in any other form than whole hides, it will be subject to the payment of duties in double the amount mentioned. Should the production of sole leather

in Panama be insufficient to meet the demands of the country, the President of the Republic is authorized to decrease or suspend the duty, reporting his action in the matter to the next Congress. The same law permits the free introduction of machinery for tanneries.—English capitalists are said to be interested in financing the new AGRICULTURAL BANK to be established in Panama and for which the National Assembly recently granted a charter. The former manager of the International Banking Corporation's interests on the Isthmus of Panama is conducting the negotiations.—According to the Star-Herald, of the City of Panama, the new WASHINGTON HOTEL at Colon was ready for occupancy in March last. This hotel contains 90 bedrooms capable of accommodating about 180 persons. The monuments to Aspinwall, Chauncey, and Stevens, the pioneers of the Panama Railroad, have been placed near the Bolivar Street entrance to this hotel. Fine lawns have been provided and the hotel is well equipped in every sense of the word.—A bill introduced into the Congress of Panama for the celebration in 1915 of a NATIONAL EXPOSITION authorizes the executive power to invest \$250,000 in the enterprise. The sum of \$30,000 was recently put at the disposal of the President of the Republic for use in celebrating the discovery of the Pacific by Balboa in 1513, but President Porras recommended that this be increased to \$250,000, so that the event could be celebrated on a larger scale and in a more fitting manner. If Congress complies with the request of the President, it is proposed to make Old Panama City the site of the exposition. As soon as the financial part of the plan is definitely provided for, the preliminary work of clearing up the Old City of Panama will immediately begin. The plan comprehends participation in the celebration of the exposition by the Governments of the Western Hemisphere and a number of European countries.



PARAGUAY

Plans have been forwarded to the board of public works at Asuncion for the construction of a CUSTOMHOUSE, warehouse, and wharf at Puerto Villeta. The plans were made by the director of the port, Sr. Jerica, who states that these improvements are badly needed to meet the ever-increasing trade of the port referred to. — The department of public instruction of the Government of Paraguay has contracted with Dr. Zürcher, of Zurich, a learned Swiss zoologist, to take charge of the DEPARTMENT OF ZOOLOGY of the National College at Asuncion, under the direction of Dr. Fiebrig.—The

Barthe NAVIGATION CO. has extended its steamboat service to the upper Paraguay River between Asuncion and Corumbá. — Dr. A. Backhaus, an expert horticulturist and agricultural instructor, has submitted a plan to the department of agriculture of the Government of Paraguay for the founding of an AGRONOMIC INSTITUTE in the country. — According to data compiled from official and private sources, the area in tobacco cultivation in the Republic of Paraguay during the present year is considerably greater than that of the previous year. It is estimated that the production of tobacco in Paraguay in 1913 will be more than twice the quantity produced in 1912. Cuban tobacco seed has been distributed freely to planters throughout the country, and a fine grade of tobacco is expected to be harvested as the result of these plantings. Paraguay leaf and manufactured tobacco is in great demand in Argentina, Uruguay, and other countries of South America and is justly celebrated wherever known for the excellence of its quality. The soil in certain parts of Paraguay yields enormous crops when planted in tobacco, and this fact renders its culture in the choicest lands of the Republic exceedingly profitable. — The report of the board of directors of the CENTRAL RAILWAY OF PARAGUAY shows that on July 31, 1912, the capital of this company amounted to £2,712,930. The gross receipts of the company for the fiscal year 1911-12 aggregated £111,983, as compared with £120,022 in 1910-11. The cost of exploitation in 1911-12 was £67,474, as compared with £68,601 in 1910-11. The net profits in 1911-12 were £44,509, as compared with £51,420 in 1910-11. The line from Asuncion was completed to Encarnacion early in 1912 and direct railway communication established with Buenos Aires and intermediate railway points in February of that year. The extension of the road toward the Falls of Iguazu revealed a density of forest and a richness of soil in the region traversed unknown and unexpected up to the present time. While this has caused an increased cost in the building of the railway, it has at the same time shown the possibilities of developing an immense freight traffic in natural products along the entire route of the line through the part of Paraguay referred to. The TRAMWAY LINE AT ASUNCION, which for many years was run by horsepower in the city proper and by steam traction in the suburbs, is to be electrified both in the city and on the suburban lines. From press reports it is learned that the Central Railway of Paraguay has acquired a controlling interest in the line, and many important improvements have recently been made in construction, equipment, and service. The concession under which the electrification of the tramway was made includes the furnishing of light and power to the city of Asuncion and to private persons residing therein. The change has been most beneficial to the traveling public, and the service has been extended and

improved in a very satisfactory manner.—Dr. Moises S. Bertoni, a distinguished scientist and botanical writer of Paraguay, has been appointed by the Paraguayan Government to represent that country at the **FIRST CONGRESS OF AGRICULTURAL DEFENSE** which will be held in Montevideo, Uruguay, during the present month.



PERU

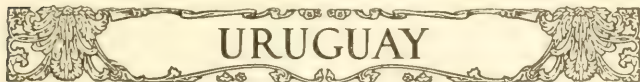
An **AGRICULTURAL EXPERIMENT STATION** has been established by the Government of Peru in the region of the Madre de Dios River with the special object of encouraging the scientific cultivation of rubber-producing trees indigenous to that section of country and for the purpose of introducing and acclimatizing useful food-producing plants. The establishment of this agricultural station is a long step forward in the permanent development of the forestal and agricultural wealth of that vast region, which has hitherto been almost wholly given over to the exploitation of wild rubber in such a reckless manner as to destroy large numbers of rubber trees, without any effort having been made to replace them by systematic cultivation on a large scale. Realizing the danger of exhausting the wild rubber trees contained in the forests of the Madre de Dios River, the Government of Peru resolved to do all in its power to stop wasteful methods of exploitation by encouraging the planting of rubber trees over vast areas of land especially adapted to their cultivation. While the cultivation of the rubber tree will occupy the paramount attention of the experiment station, the growing of staple agricultural products adapted to, or which may be acclimatized in that section of the country, will be encouraged in every way possible. The plans of the experiment station seem to be entirely feasible, and a number of the principal landowners of the region referred to are disposed to adopt them on a large scale as quickly as circumstances will permit.—An executive decree of February 28, 1913, admits **FREE IMPORTS** into the Republic of arsenate and acetate of lead, lead arsenic compounds, and Paris green for use in combating the boll weevil on cotton plantations.—The *Prensa*, of Lima, of February 25, 1913, gives the new **CABINET** of President Billinghurst, as follows: Sr. Federico Luna y Peralta, president of the Cabinet and minister of interior and police; Sr. Carlos A. Velarde, minister of war and marine; Dr. Wenceslao Valera, minister of foreign relations; Dr. Francisco Moreyra y Riglos, minister of justice, worship, and instruction; Engineer Fermín Málaga

Santolalla, minister of fomento and public works, and Sr. Felipe Derteano, minister of finance and commerce. The Cabinet took the oath of office on the 24th of February of the present year. — Rafael Mendrano and Antonio Calvache D. CUBAN STUDENTS from Santiago de Cuba, have taken up a course of mining engineering in the University at Lima, Peru, and two Peruvian students have gone to Cuba to study agronomy. These exchanges have been made in accordance with an agreement between the Governments of Peru and Cuba. — On February 8 the first copy of the WALL MAP of Peru, engraved from drawing approved by the Geographic Society in Lima, was presented to the President of the Republic. The map was lithographed in Paris, contains much new data, and is the most complete and up-to-date wall map of the Republic in existence at the present time. — A concession has been granted to Hugo Somerkamp for the use of 100 liters of water per second from the Chiara River for the IRRIGATION of lands located in the Province of Paita. A fine quality of cotton is grown in the valleys of this Province, and landowners in the neighborhood of mountain streams are beginning more and more to avail themselves, in the raising of cotton and other agricultural products, of such water as may be obtainable for irrigation purposes, thereby insuring a high yield and a succession of crops. — A young Peruvian of the city of Lima recently invented a military type of MONOPLANE, the model of which was highly commended by Government engineers. A machine of this type is being constructed in Lima under the supervision of Engineer Zapata, of the Federal capital, and public exhibitions of same are soon to be made before the military and civil authorities. — The Official Gazette of the Government of Peru, of January 10 last, contains the full text of the IRRIGATION AND COLONIZATION law enacted for the benefit of the coast region of the Republic. Under this law the President is authorized to negotiate the sale of £2,000,000 thirty-year $5\frac{1}{2}$ per cent annual interest bearing bonds, the proceeds of which are to be used exclusively for irrigation works and colonization purposes. After the Government engineers have selected and reported upon the lands to be irrigated and colonized, £1,000,000 of these bonds will be issued, the second million to be issued in whole or in part after the irrigation works have been commenced, provided new funds for that purpose or colonization requirements are needed. The irrigation works may be done by the executive power administratively or by contract under the supervision of Government engineers. The President is given authority to expropriate such lands as may be needed for the irrigation works and colonization purposes. White colonists with sufficient capital to maintain themselves until the maturity of the first crop are to be settled upon the lands, and will be given an opportunity to buy on easy terms up to 60 hectares of irrigated lands.

SALVADOR

The press of the city of San Salvador reports that a BANANA COMPANY, which will operate on a large scale, is soon to establish banana plantations in the Department of Usulután, near the port of El Triunfo, through which shipments of bananas and other agricultural products will be made. Statements have been made from time to time that banana plants would not thrive on the Pacific coast of Salvador, due, principally, to the slight rainfall of the region referred to. This, however, seems to be an erroneous view, since there are large banana plantations at different places on the Pacific coast of Mexico, Ecuador, and Colombia, where climatic conditions are similar to those of the western part of San Salvador, to say nothing of the success in banana growing in Honolulu, which has a climate very much resembling that of the Pacific coast of the Republic of Salvador. The company proposes to use irrigation in the growing of bananas when the lack of rainfall is such as to justify it in doing so. Facilities for transporting fruits grown near the Pacific coast line of Salvador are good at the present time, and can be improved and cheapened in the future if a sufficient quantity of marketable fruit is raised to justify the increased outlay necessary to improve the transportation facilities for this class of products.—Sr. Gabino Mata, jr., a practical stockman and agriculturist of the Republic of Salvador, has been appointed one of the directors of the NATIONAL EXPOSITION OF AGRICULTURE, STOCKRAISING, AND INDUSTRY to be held in the city of San Salvador in August next. Great preparations are being made for the success of the exposition, and it is predicted that it will be one of the most successful ever held in Central America.—A recent executive order repeals the decree of October 19, 1912, which increased the duties on MERCHANDISE IMPORTED by persons not registered as merchants in the Republic of Salvador. It was contended that the decree referred to was detrimental to public policy and probably unconstitutional. The law, as it now stands, places importers, whether private persons, commercial houses, or brokers, on an equality in the introduction of merchandise into the country. —The four principal BANKS of the Republic of Salvador distributed to their stockholders during the last half of 1912, dividends to the amount of 470,000 pesos. The assets of these banks, in round numbers, are 22,000,000 pesos, made up as follows: Silver coin, 5,000,000; loans secured by mortgages, 3,000,000; notes and discounted drafts, 3,000,000; debits, account current, 9,800,000; stock in sundry enterprises, 200,000; other assets, domestic and foreign, 1,000,000. The liabilities of these banks aggregate

14,000,000 pesos, and consist of bank notes in circulation, 5,390,000; sight deposits and accounts current, 5,010,000; fixed time deposits, 2,600,000, and other domestic and foreign credits, 1,000,000. For some time past work has been actively progressing on the section of the NATIONAL HIGHWAY which runs from Zaragoza to Santa Tecla, and for the last few months the road has been in condition to admit of automobile traffic between the places mentioned. The road referred to is a very popular and much used highway, especially during the bathing season, which commences in February. The coast cities of Salvador are being visited from year to year by an increased number of TOURISTS. Recently more than 40 tourists and business men disembarked at La Libertad and endeavored to arrange for a land trip from that place to Acapulco, but owing to a lack of automobiles obtainable for this class of service at La Libertad, the trip had to be abandoned. Press reports state that these conditions are to be remedied and that facilities will be provided for excursions into different parts of the interior from any of the principal ports of Salvador. When these arrangements are completed a large number of people interested in Central America will be able to make first-hand investigations of the topography, natural resources, and commerce of a number of the countries.



URUGUAY

The message of the President of Uruguay relating to the establishment of SLAUGHTER YARDS AND SLAUGHTERHOUSES authorizes the chief executive to employ the revenue from the official cattle marks and brands up to \$1,850,000 in a slaughter yard (tablada) and slaughterhouse (matadero) in Montevideo, with a maximum expenditure in the former case of \$500,000, and in the latter of \$900,000, with an additional maximum expenditure of \$450,000 in establishing 18 slaughterhouses in the departments. On the basis of the revenue affected the President may obtain bank advances or enter into other operations of credit for the purpose of carrying on and completing the work. The plan in detail for the establishment of this industry in Uruguay by the Government is that presented by Dr. Bauza, the national inspector of animal sanitary police of the Republic, who recently visited the United States of North America to study the organization of slaughter yards and allied industries in that country. The object of the Government in engaging in this branch of the meat industry is to cheapen the price of meats to the consumer, and at the same time obtain the maximum benefit from every animal slaughtered by a complete

utilization of all the by-products.—The profits of the BANK OF THE REPUBLIC in 1912 were \$2,411,105. This profit is to be applied, approximately, as follows: On the Uruguay loan, \$420,000; legislative palace fund, \$50,000, and the remainder, \$1,941,105, will be added to the paid-up capital of the bank, thereby raising the amount to \$11,136,330.—The press of Montevideo states that about two years ago the President authorized a foreign engineer to complete the technical studies required for the installation of a rapid ELECTRIC RAILWAY from Montevideo to Maldonado and Punta del Este. These studies were terminated over a year and a half ago, and negotiations are now pending with a strong financial syndicate for the building and equipment of the line. When the preliminary arrangements have been agreed upon, steps will be taken to secure the necessary concession under which the construction of the line may be commenced at once.—The Montevideo Times states that negotiations have been opened between the Uruguayan and Brazilian Governments relative to the construction of a large INTERNATIONAL BRIDGE over the Yaguaron River. This bridge will connect the towns of Artigas and Yaguaron, the former being on the Uruguayan side of the frontier and the latter on the Brazilian side. The plans for the bridge will be prepared by the technical commission appointed by the two Governments, assisted by the boundary commission now engaged in marking out the frontier line. The bridge will be a compound one, sufficiently wide to admit of foot, wheel, cargo, and railway traffic. The treaty preliminary to the construction of the bridge has been drafted and will be laid before the Senate in due course for consideration.—The "Diario Oficial," of the Republic of Uruguay, of January 17, 1913, contains the full text of the LICENSE TAX for the Federal capital for the year 1912-13, as well as of the decree regulating the same. The decree regulating the tax provides that the direction general of direct taxes shall, by means of appraisers, make a general classification of trades, industries, etc., to be completed by March 1 last.—The HORTICULTURAL EXHIBITION held at the Prado in Montevideo in January and February last was one of the most useful displays ever held in the federal capital. The exhibits occupied three large buildings, and fruits and vegetables of the finest type and quality, and in a great number of varieties, were shown. The exhibits of plums, peaches, and apricots were notable, and fine displays of apples and oranges were also made. The effect of the exposition will undoubtedly be to stimulate in a healthy manner the fruit and vegetable industries in the Republic, and especially in the neighborhood of large cities and shipping points.—The annual report of the Montevideo CHAMBER OF COMMERCE for 1912 shows that the total amount of stock exchange operations for the

year was \$139,408,498. — The CENTRAL URUGUAY RAILWAY has increased its capital stock from £3,500,000 to £4,500,000. — The post office department of Uruguay reports a SURPLUS of \$152,828 for the year 1912, or \$17,304 more than for 1911. — The POPULATION of Montevideo on December 31, 1912, was 352,487. — The BANCO POPULAR has increased its capital from \$3,000,000 to \$5,000,000 and has made some changes in its statutes. — The first NATIONAL FRUIT EXPOSITION was officially opened January 25, 1913, with appropriate ceremonies, to continue until some date in March. The display of fruits and vegetables proves that Uruguay can compete with the world in both quality and variety, while the large attendance shows that great interest is felt in the movement.

VENEZUELA

The FLUVIAL NAVIGATION & COASTWISE CO., of Venezuela, declared dividends during the last half of 1912 to the amount of 360,000 bolivars. All of the vessels of this company engaged in seagoing, lake, and river traffic were thoroughly overhauled and repaired during the past year at an expense of 130,073 bolivars, and, in addition, 183,000 bolivars were disbursed on account of the construction of two new boats, namely, the *Nuevo Mara* and the *Nuevo Feliz*. The company was able to credit 5 per cent of its gross profits to the reserve fund. The company does a large and ever increasing business on the Orinoco River, the Atlantic Ocean, and Caribbean Sea coasts and in the Gulf of Maracaibo and its tributaries. — The Spanish board of trade of Caracas states that the best grade of CACAO exported from the Republic of Venezuela, known as Cacao fino, is very much in demand in Spain, where it is preferred to the exports of this article from any other country. — Two American mining engineers, graduates of the University of Chicago, and members of the American Institute of Mining Engineers, are at present doing exploration work in the territory of the Delta Amacuro. These experts state that this territory is exceedingly rich in mineral wealth and that great opportunities are offered for the profitable investment of capital in mining enterprises. Recently Col. Pedro Olivares Mora discovered three iron mines, covering an area of 600 hectares, in the municipality of El Toro, in the Federal Territory of the Delta Amacuro. These mines are said to contain extensive deposits of an easily reducible iron ore of a high commercial grade. — The Riopauji Petroleum & Asphalt Co. has been organized in Caracas, Venezuela, to exploit the ASPHALT AND PETROLEUM deposits of the Betijoque district in the State of Trujillo. — The

demand for asphalt abroad is constantly increasing, and petroleum is always a marketable product in all civilized countries. The asphalt deposit referred to is perhaps one of the most fluid products of its kind ever worked for commercial purposes, and it is claimed that examination shows the quality to be highly desirable for paving and other uses. The Riopauji deposit is about 25 kilometers from Lake Maracaibo, situated at an elevation of about 40 meters above the level of the lake, the intervening ground gradually declining to the water's edge. This fact will aid materially in the construction of a railway at a minimum cost for the transportation of the asphalt to Lake Maracaibo. It is also stated that geologists who have examined the region report that the substance from which paraffin is extracted is found in this zone, and it is possible that that industry could also be profitably developed in the region referred to. The company not only proposes to work the Riopauji asphalt and petroleum deposits, but also to open up rail and wagon roads in the vicinity, and especially the wagon road from Carora to the Riopauji Railway, thereby connecting that portion of the State of Lara with Lake Maracaibo, a project that has long been desired for the development of the agricultural and other interests of that section of the country.—The department of public instruction of the Republic of Venezuela has ordered that the instruction for the class of TRAINED NURSES in the School of Arts and Crafts for Women be given in a special clinic called "School for Nurses," to be held in one of the halls of the Vargas Hospital in Caracas under the direction of one of the hospital physicians. Dr. Francisco A. Riquez has been chosen director of the new school.



BULLETIN OF THE PAN AMERICAN UNION

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FRANCISCO J. YÁNES, ASSISTANT DIRECTOR.



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Panama.....Señor Don J. E. LEFEVRE,
Office of Legation "The Portland," Washington, D. C.

¹ Absent.



SEÑOR DR. FRANCISCO BERTRAND,
Who succeeds the late Gen. Bonilla as President
of Honduras.



OF XXXVI

MAY 1906

No. 5

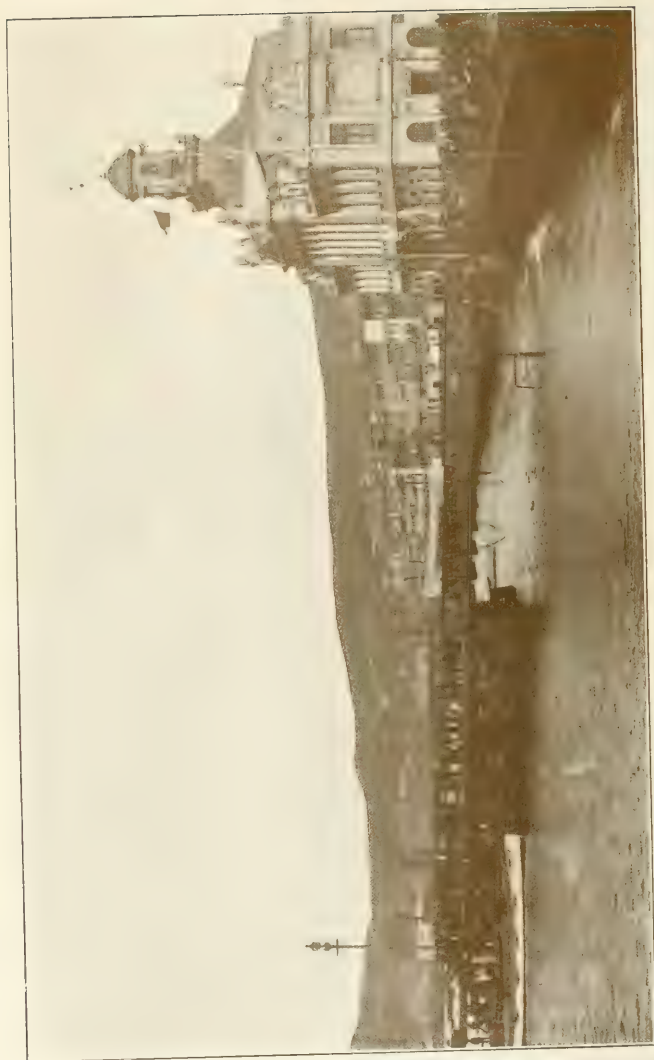
THE CITY OF VALPARAISO, CHILE

VALPARAISO is the second city in size in Chile.² It is also the most important commercial city and port of that Republic, and can be compared with San Francisco in respect to its activities. To-day all the elements of a modern city are there, and the promises for the future are such that it bids fair to become one of the great trade centers of the world.

Valparaiso owes a not insignificant share of the progress it has made within recent years to the destructive earthquake that took place on August 16, 1906. What seemed at first to be an overwhelming disaster has been turned, by the energy and ambition of the inhabitants and by the support of the Government, into the very means through which the long-dreamed reconstruction could be carried out. Those who knew Valparaiso in its earlier days are pleased to note the improvements already made within the six years that have passed since that catastrophe, and all who now become acquainted with Valparaiso for the first time are enthusiastic in their prophecies for the future growth of the seaport.

The words of one of the most distinguished travelers and critics, James Bryce, who visited South America two years ago, may well be quoted here from his book, "South America":

This is Valparaiso. When I reached it I felt myself again in the Mediterranean. So much of Valparaiso is built on hills, and has a marked character of its own, though the dryness of the hills and the clearness of the light make it faintly recall one of those Spanish or Italian towns which glitter on the steep shores of the Mediterranean. It resembles Messina, in Sicily, in being very long and narrow, for here, as there, the heights, rising abruptly from the shore,



BAY AND HARBOR OF VALPARAISO SHOWING THE CUSTOMHOUSE.

The portion of the city was but little injured by the earthquake, and the buildings are therefore substantially now the same as they were before. The harbor itself, however, will be greatly improved by the work in progress, and much of this water front will be changed.



THE COVERMENT, ALBANY

The ship is the "Coverment," a vessel of the Albany Harbor, N. Y., built in 1860.

ALBANY, N. Y., 1860. THE COVERMENT, N. Y., built in 1860.

leave little space for houses, and the lower part of the town has less than a quarter of a mile in breadth. On this narrow strip are all the places of business—banks, shipping offices, and shops. * * * On the hills above, rising steeply 200 feet or more, stands the upper town. Communication between the lower and upper towns is carried on chiefly by elevators (lifts).

The upper town has been taken up largely by residences of the richer people, and although many workingmen's cottages have been built on outlying property, there has been little crowding on the broader spaces above, so that pretty gardens and broad streets are the rule. From this elevation splendid views can be obtained of the bay, of the limitless Pacific and along the coast to the north, and the sight of the busy, active commercial city beneath is always attractive.

This lower town was the area of Valparaiso which suffered so severely from the earthquake, and which has now been reconstructed so expe-



THE FASHIONABLE RACE COURSE FOR VALPARAISO

At Valparaiso, 100 miles from the port on the railway to Santiago, is the summer resort and watering place for many of the people, especially of the northern part of the Republic. During the season horse racing is one of the most popular sports, and this fine track has seen some of the best blooded stock of the world at the meetings held here.

ditionally. In practically every detail it is a new city, the improvements having been planned to meet modern requirements. Valparaiso is not old in a material sense, although its age goes back to 1536, but for generations it had no great prestige, like Santiago or Lima, nor even 100 years ago, when its population was scarcely above 5,000, could it be considered in the same class with better known seaports. At the time of the earthquake, however, with the tremendous impetus given to west coast commerce by the use of steamships and the later railway, Valparaiso has become one of the most progressive ports of the whole South American coastline. Crowded as it had been, built with no organized regard to its future requirements, and congested by the growing traffic for which no adequate accommodation had been provided, this lower town did not come up to the ideals of the inhabitants of Valparaiso, and after the first shock was over they went to work with a will to reconstruct systematically what had been destroyed.



THE NATIONAL CAPITOL IN ANNAPOLIS

for the "Annapolis" of that Republic is very appropriate.



THE HARBOR AT ANNAPOLIS, MARYLAND



MUNICIPAL IMPROVEMENTS IN VALPARAISO.

These two photographs show the character of the improvements being made throughout the city, especially where the destruction caused by the earthquake of 1906 required a reconstruction of both streets and buildings. Such attractive squares and monuments at street intersections are characteristic of the new Valparaíso.



ANOTHER ATTRACTIVE SQUARE IN VALPARAISO.

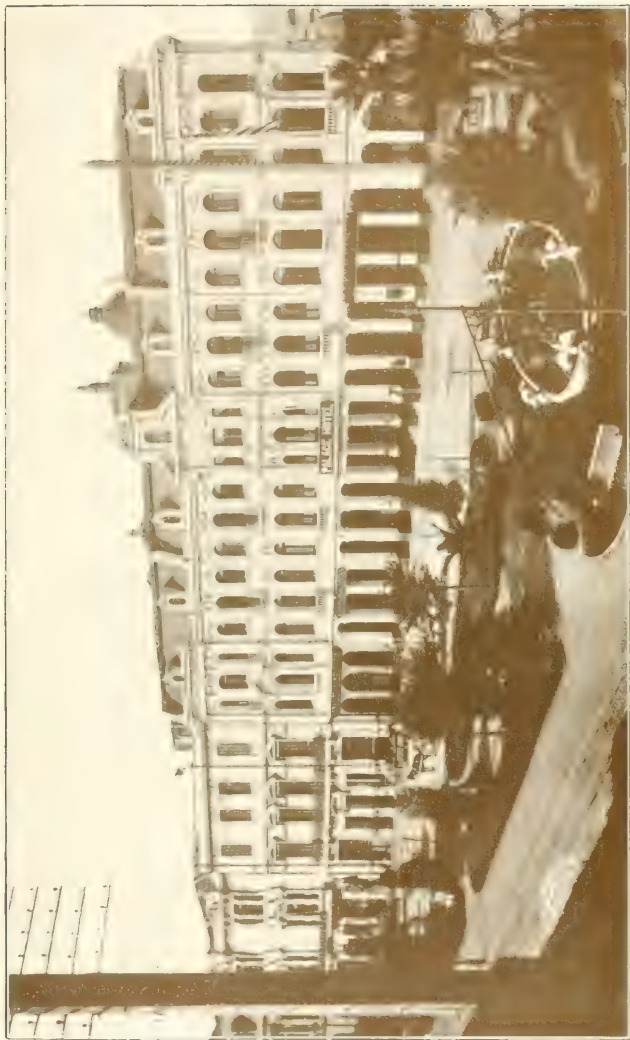


STREET IN VALPARAISO.

To-day the new Valparaiso is better planned in every respect. Its irregular site between the sinuous coastline and the spur from the hills at the back makes the city less uniform and rectangular than are many cities in Latin America. Old historical buildings are lacking, and perhaps there is no great architectural variety, but the houses are generally new, their bright colors please the eye, and the glimpses of rocky heights seen at the eastern end of all cross streets and of the sea glittering toward the west give a charm to this lower town. Its atmosphere of bustle, the alertness of the people, and the freshness of all that is displayed in the shop windows encourage the feeling in the mind of the visitor that Chile and the Chilenos neglect no opportunity to advance here.

Along the narrow strip of coast line between the sea and the hills, splendid results have been accomplished. Where were formerly crooked, unsightly streets, are now broad, straight and handsome highways. The old structures have disappeared, either as the result of the earthquake or of the desire to bring everything up to the substantial modern standard demanded. Electric trams (street cars) ply from one end of the lower town to the other, while carriages and automobiles (taxicabs) can be engaged for quicker service. Two most interesting features of the new lower town at once engage the eye. One is the complete system of paving adopted almost throughout the area, the other is the well proportioned space allotted at well-chosen intervals for small parks and public breathing spaces, in which some sort of adornment, like a statue or a public fountain, has already been erected.

Whatever Valparaiso may have been before the earthquake of 1906, it certainly is now a city in which the traveler and tourist feels a most decided satisfaction. Although it is true that to a certain extent it lacks monuments and memories which bind it to the past, yet no criticism of crudeness can be brought against it. And while the city still has a character that suggests its history, it is vigorously new—all things breathe of youth. The life of the place is therefore emblematic of youth. One's senses are alive to this impression. The people are not loiterers, although they have not acquired the worrying countenance of their cousins, the Yankees of North America. The bustle in the street is sufficient to keep the stranger alert, without being so intense as to make him fretful. The shop windows are attractively full of the latest wares from many parts of the world, and the shopkeepers are eager in their efforts to sell, while retaining all that polite and friendly attitude so characteristic of the Latin-American. It would be difficult to think of anything needed for business or comfort which could not be found with but little search among the better supplied shops or stores of Valparaiso. Most offices are well equipped with modern appliances, and even the smallest business establishments are energized by the same ambitions. Valparaiso is thus distinctly modern.



PLAZA DE LOS ROMEROS (HERMENEGILDO) - SAN JUAN, P.R.

10. The building is one of the most important in the city, and is the seat of the government. It is a fine example of the architecture of the island, and is one of the most beautiful buildings in the city.



THE MONUMENT GIVEN TO VALPARAISO BY BRITISH RESIDENTS.

During the celebration of the centennial in 1910 the various foreign colonies helped to decorate the city, and at the same time to show their regard for their adopted home, by presenting some appropriate and lasting memorial of the event. The British colony selected this arch as their gift to Valparaiso.

Some of the earlier but permanent improvements of Valparaiso were not completely destroyed by the earthquake, yet they were injured at the time and have been since the disaster restored to still better service, and deserve special remark. One of the most noticeable is the water supply of the city—

for Valparaiso was one of the first cities of South America to use iron pipes for this purpose. The supply has now been perfected by means of the construction of an immense dam * * * which collects the rain water from a hydrographic basin with an area of 22 acres. The water is led by an aqueduct to two distribution tanks some miles away and nearly 1,200 feet above sea level. From these two tanks the main pipes, capable of providing for a daily consumption of 14½ million gallons, carry the water into the city.

The drainage of the city also is well developed, the "separate" system having been carried out 26 years ago, but additional improvements on this system, which will include inclosing the last open sewer in the city and grading of streets on the hills, are under way at a considerable outlay of money. The health and beauty of the city will thereby be materially increased.

There is another phase of the appearance of Valparaiso which accentuates the position of the city in the scale of Latin American municipalities. It is natural in a populous city and in the principal commercial center of the Republic that all the necessities of life are to be found there, and the town can boast large and valuable buildings, public and private, such as banks, factories, shipping warehouses, and others for social institutions and for educational or charitable purposes. All these pertain to any city in any part of the world. But if—as is usually the case—

the traveler approaches the seaport from Santiago, he will be impressed at once with the contrast in the disposition of the streets, in the architecture of the houses, and in the general character of the city. The difference is easily explainable: The design of Valparaiso was forced upon those who built it (so says Sr. Canto in his book on Chile), that of Santiago was deliberately selected. In Valparaiso all else had to be subordinated to the needs of the port; in Santiago man has molded natural features to his will—for instance, the rocky fastness of Santa Lucia converted into a pleasure ground. * * * In the capital of Chile space seems of little account; the houses are built upon a generous plan.

but in Valparaiso the limited shore line and the desire to be as close as possible to the harbor necessitated another pattern of construction.

The harbor is, in fact, the *raison d'être* of Valparaiso, for through this port are brought fully 40 per cent of the importations into Chile.

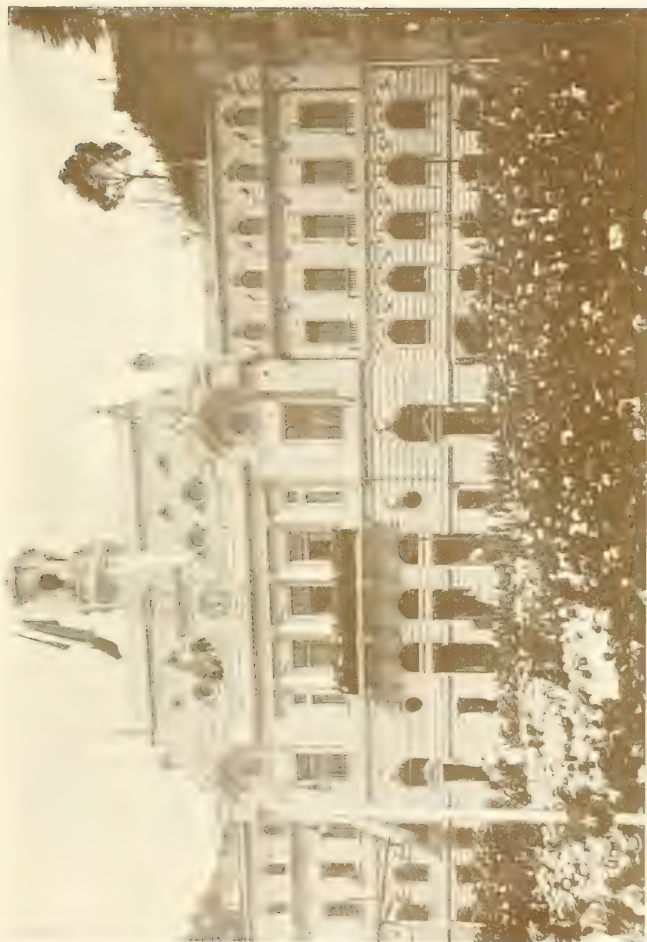
The harbor is full of vessels from all quarters (Bryce, *South America*), coasting steamers that ply to Callao and Panama, sailing ships as well as steamers from San Francisco and others from Australia * * * besides vessels that have come from Europe round Cape Horn or through the Strait of Magellan.

This harbor is really an open roadstead in a semicircular bay facing toward the north. It is partly surrounded by hills at the base of which is the narrow strip of shore. There is shelter from all sides



ONE OF THE INCLINED RAILWAYS ELEVATORS, IN VALPARAISO

Valparaíso is divided into the lower and the upper towns. The lower town lies on the narrow strip along the seashore, and is the area of all the business and commercial activity. The upper town, on the hills surrounding the bay, is given over to residence. Connecting the two divisions of the city are numerous elevators, some reaching the height by an almost perpendicular ascent, others taking a more gradual but still quite a steep course. Their equipment is modern.



THE GOVERNOR'S PALACE, AT VALPARAISO, CHILE

See also page 12, for a description of the Governor's Palace, and page 13, for a description of the Governor's Palace.



THE MERCURIO BUILDING IN VALPARAISO

The daily newspaper is the oldest continuous publication in Chile. It is closely and harmoniously associated with its namesake in Santiago, which is issued as a morning paper, while this Mercurio in Valparaíso appears in the afternoon. The building is on one of the main streets, lying at the border between the wholesale and the retail or shopping districts of the city.

except on the north, so that when, as unfortunately happens during the winter months of June, July, August, and September, the fierce gales blow from that direction, no safety can be at present guaranteed to vessels in port, and they are therefore compelled to run out to sea or wait out an insecure anchorage in the very deep water of the bay.

It has always been the intention of the city and nation to overcome this insecurity by suitable protective methods. Many plans have been suggested, some of them fanciful, some practical. And now the latest and very probably the best modifications yet devised have been adopted for the modernization of the port of Valparaiso. On October 6, 1912, work was begun on these harbor improvements, and for the next five years will be continued, at a cost closely approaching \$15,000,000 (gold) in all. The space allotted for safe anchorage will be 88 hectares (almost 220 acres), which will give protection to an annual entry of 1,850 vessels, with a total of 7,180,000 tons, necessitating the handling of 3,700,000 tons of cargo, which is anticipating the increase of traffic that will come with the opening of the Panama Canal.

The work entailed to bring about this result consists (according to The Engineer, London, May 24, 1912) of the following: (1) A break-water 288 meters (944.6 feet) long; (2) a quay wall 630 meters (2,066.4 feet) long, which includes the filling behind this wall in order to reclaim land for warehouses, railway tracks, etc.; (3) an extension and strengthening of the fiscal wharf to a length of 370 meters (1,213.6 feet); (4) a quay wall 210 meters (688.8 feet) long, also including filling and reclaiming land for warehouses and tracks; (5) a jetty 250 meters (820 feet) long and 100 meters (328 feet) wide, with quay walls on each side; (6) a coal wharf 200 meters (656 feet) long and 30 meters (98.4 feet) wide, including transporters, hoists, cranes and railway tracks; (7) all necessary customs and other warehouses, administration buildings, lighthouses, coastguard stations, and similar official structures.

Such improvements are far-reaching. With these facilities for the rapid and at all times safe handling of cargoes, the disadvantages from which Valparaiso has frequently suffered will be overcome. Already the rail connections with the capital, Santiago, and through that center with the rest of the country, are frequent and rapid, and the project now under way to use electricity as the motive power on the main line between the two points, will amplify facilities. Then again, the longitudinal railway toward the north from this main line will still further enlarge Valparaiso's sphere of influence, as the intermediate zone between the central valley and the nitrate fields will thus be made accessible. It is therefore a logical conclusion that Valparaiso is destined to become, both by itself and by the impetus given to South America on the opening of the Panama Canal, one of the best and most important ports on the entire west Pacific coast.



THE GREAT ROQUE CANAL OF MATANZAS, CUBA

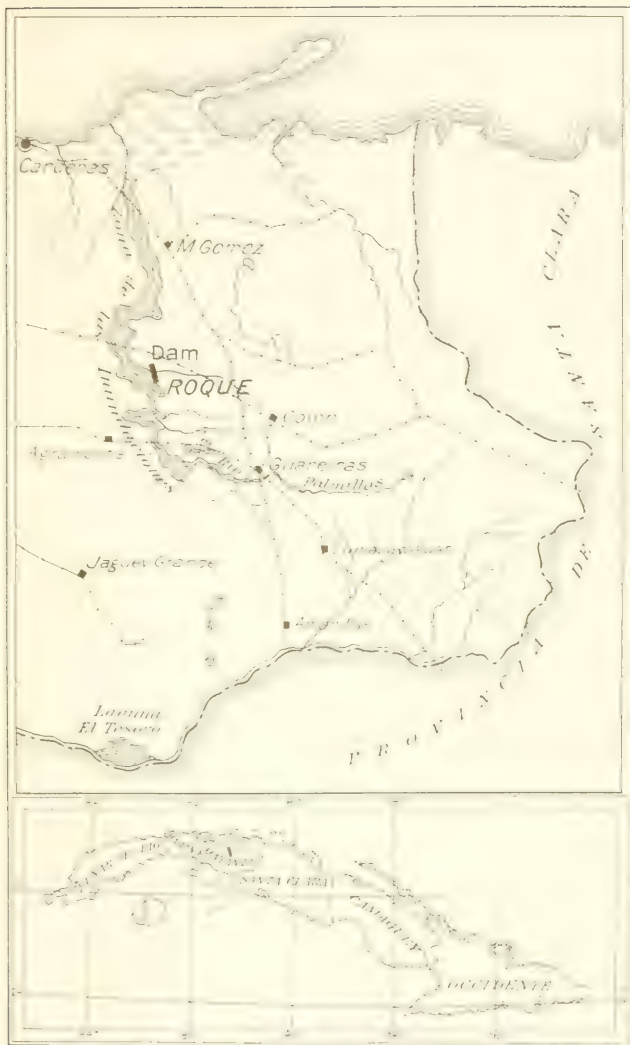
AMONG the principal activities for advancing agriculture in the Republic of Cuba, which is the country's most important source of riches, the administration of Gen. Jose M. Gomez has given much attention to the reclamation of swamps and lowlands. Owing to the general topography of Cuba certain sections are subject to great inundations, which frequently cover hundreds of square kilometers and thereby seriously damage agriculture and allied industries.

In the Province of Matanzas, which stands first in the production of sugar, are to be found the swamps of Majaguillar and Zapata, on the north and on the south coasts, respectively, which together occupy 1,530 square kilometers, covered with water, which has alarmingly increased during the last 20 years.

In order to clearly understand these conditions we will present a study of the hydrography, topography, and nature of the soil in this part of Matanzas. From the western boundary of the Province of Santa Clara, including three-fourths of Matanzas Province lying between east and west meridians, there are no streams that could be properly classed as rivers, excepting La Palma, which flows north, and the Hanabana, flowing southward, both originating in the same natural basin. The water courses of the Province generally disappear in subterranean caverns or are absorbed into the earth, to return later as springs or streams, which finally find their way to the coasts, not, however, without forming marshes and swamps to the detriment of agricultural lands.

The general topography of this section of the island, whose limits are clearly defined, presents no mountains of importance. Some hills exist, but they are not classed with the name of mountain; and it may be said that from a central plain the country gradually descends to the coasts of both seas.

In the central basin toward the western section of Matanzas there are valleys which collect more or less the waters feeding the many



THE PROVINCE OF MATANZAS, CUBA, SHOWING THE INUNDATED ZONE WHERE THE DAM IS TO BE CONSTRUCTED.

streams forming the La Palma and the Hanabana Rivers. When the excessive rains come, saturating the hills and valleys, a third stream is formed, whose general course is uncertain, but which successively fills the little valleys and ravines; one branch finally reaches a cavern called La Carraca, south of the villages of Guareiras and Agramonte, where it usually disappears. This course of the water is called the Palmillas River, which plays an important part in the floods of the Roque.

Along the watercourses the soil presents two distinct aspects. From the basin which collects them, as above mentioned, and which includes an extensive triangle uniting the villages of San Juan de los

Ramos, Palmilla, and San Pedro de Mayabon, to the town of Guareiras, following the course of the Palmillas, the soil is varied and light limestone, abounding in lakes and ponds. From Guareiras and Carraca toward the north, directly in the course of the floods, are found an abundance of calcareous formations, rocks in masses, and small caverns.

As will be seen from the above, and by reason of the great area normally covered by water, the inundations extend from the far north and from the far south—from the Bay of Cardenas and from Majaguillar—and spread ruin and desolation in their path.

The Government of Cuba designated the Cuban engineer, Aniceto G. Menocal,



SR. DON LUIS F. RAMOS,

Chief engineer of public works and technical director of the Roque Canal. Sr. Ramos entered the department of public works in 1909, after which he conducted many extensive studies looking to the great work of building the Roque Canal. He has been chief engineer of two provinces of Santa Clara and Matanzas, and before being called to the present post held the position of chief of strategies of the public works department.

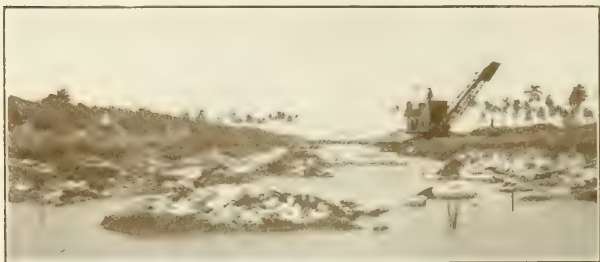
cal, brigadier general in the United States Army, and the originator of the project for an interoceanic canal through Nicaragua, to make a thorough study and examination looking to the construction of works necessary to control the floods of the Roque, by building a canal from north to south through the district in question. Gen. Menocal followed the problem in accordance with the solution proposed by Engineer Luis F. Ramos, and upon which plan the President of the Republic intrusted the work, the actual contract being given to Srs. Champion & Co., who will push the enterprise to success.



MAINTENANCE SECTION OF THE U.S.S. "ALBATROSS" (BB-3) AT THE BUREAU OF NAVAL AVIATION, PEARL HARBOR, HAWAII.



SCENE ALONG THE ROUTE OF THE CANAL WHERE THE CONSTRUCTION WORK HAS JUST BEEN COMMENCED, MATANZAS. CUBA.



ANOTHER SCENE SHOWING MORE EXTENSIVE PROGRESS ALONG THE ROUTE OF THE CANAL, AND IN THE DISTANCE IS SHOWN THE TYPE OF MACHINE USED IN EXCAVATING.



GENERAL VIEW OF THE MODERN SUCTION DREDGE ON A SECTION OF THE CANAL NEARING COMPLETION.

The implements and machinery used in the work were selected especially for the class of construction demanded and were based largely upon similar needs and work done at Panama.

The anticipated results can scarcely be overestimated. A region of lakes and marshes, where the work is to be done and which hitherto, owing to the prevailing conditions, has been a great hindrance to agricultural pursuits, now becomes a field for activity.

Not only by reason of new zones being opened, but also because the abandoned farms and plantations may now be made to produce, the usual swampy and marshy section will become wonderfully productive. The lands are not only rich in natural soil ingredients, but the fertility is greatly increased by the sediment which for many years has been accumulating, and labor and capital will find a generous response to their efforts.

The engineering head of the enterprise, Sr. Luis F. Ramos, is making every effort to minimize the dangers of any premature work on the part of planters, and the water will be turned into the new course as fast as work will permit. Should a flood come at any unexpected time the results might be disastrous, and for this reason a public circular was prepared which contained timely advice relative to the work and its progress and details as to the cost and the advantages of draining the lands.

Although 1,500,000 pesos were at first appropriated, it may be necessary to call for an additional 500,000 to supplement the original amount, in order to cover certain necessary alterations and omissions from the first plans.

The total length of the canal will be 80 kilometers, with a width of 50 meters at the bottom, a slope of 1 to 1½ meters, and a fluctuation level of between 1 and 5 meters. The work was begun on August 13, 1911, the President of the Republic, cabinet officers, provincial officials, and other dignitaries, together with many prominent citizens, being present at the opening ceremonies.



THE CONQUEST OF THE TROPICS

BEFORE the discovery of the relationship between yellow fever and the mosquito a dozen years ago, there were comparatively few ports on the Caribbean Sea and the Gulf coast of Central America that were not considered dangerous from a sanitary point of view; and the stranger who ventured to such sections for business purposes was either a hero or not wanted at home. Capital drawn thither by the unusual richness of the soil was in numerous instances regarded as a precarious venture, and following in the wake of investments there was, as a rule, a heavy loss of life. As furnishing typical examples of these facts, we need only refer to the efforts of the French at Panama and their unfortunate failure, which may be attributed largely to the lack of scientific knowledge of the transmission of yellow fever and malaria.

When we consider the temperature, rainfall, and soil conditions, and their relations to the extraordinary flora and fauna of tropical latitudes, we can not fail to note the large classification of disease-producing organisms; and experience has demonstrated that without hygienic and sanitary improvement, all species thrive, and apparently join in an effort to make their native heath an impossible abode for the foreigner. It is only by means of sanitation that we have been able to produce unfavorable conditions for the growth of these disease-producing germs, and to such an end much energy has been directed.

The results of the splendid work at Panama has been heralded around the world, and many private corporations and individuals are wisely taking advantage of the lessons that have been taught on the Isthmus. Where great tropical enterprises are to be developed, the present day officials make the beginning by organizing a competent medical corps, because the health of the men is one of the first requisites of success.

The deadly mosquito, one of the leading causes of tropical disease, was studied at Habana and its awful ravages made known, and to-day the Walter Reed Hospital, at Washington, stands as a memorial to one of the scientists who fought and died for the cause—a cause that has made the Tropics, in many instances, a safe and pleasant place of abode. The casual visitor or the laborer at Panama now feels as safe as anywhere else; and it might be said that the real conquest of the Tropics has its beginning there. In the heart of the



A STREET SCENE IN PORT JERVIS, NEW YORK, BEFORE THE DESTRUCTION

Photograph taken by the U. S. Army, looking down the street from the corner of the street and the river, showing the street and the river, and the buildings on the left and right.



LIMON, COSTA RICA.

View of main hospital with a glimpse of the pleasant surroundings



LIMON, COSTA RICA.

Type of building adopted for general use as bachelors' quarters. The ample and well-screened porch space is similar to that of many buildings in the Canal Zone.

Brazilian jungle the lessons learned on the Isthmus have been successfully applied to railway construction around the falls of the Madeira River, and the products of the primeval forests are brought under the dominion of man. Indeed, life at Porto Velho under modern sanitary regulations has made possible the building of this 220 miles of railroad: 40 years ago attempts were made, but death and disease drove the workers from the field and the forests were left to wild nature until, as at present, man has worked out many secrets that completely change living conditions and environments.

Private concerns in all parts of the world are taking advantage of the possibilities of tropical enterprise, rendered most attractive and profitable by reason of modern sanitary precautions, which make life in such zones as safe as in many other sections.

In this connection the enterprise of the United Fruit Co. stands out as a shining example of successful work in the Tropics. This concern is wisely spending vast sums of money in order to make the life of its army of employees safe and healthful. Its roll of 32,000 people to care for is a stupendous task. In the Republics of Panama and Costa Rica the company has about 19,000 employees, who are distributed over an area of 200 square miles. In Nicaragua, Guatemala, and Honduras, there are 13,000 other employees in an area of 300 square miles, making a grand total of workers almost as large as the Government maintains on the Panama Canal.

This corporation has successfully cultivated nearly 1,000,000 acres of land, and in doing so has employed a personnel of something like 50,000 men. It was found necessary to cooperate with health authorities in ridding their cultivations and adjoining port cities of quarantinable diseases, agreeable to the requirements of the United States Public Health Service. So extensive has this work become that the company found it best to organize a regular medical department of its own in order that the best results might be attained; and at present the service embraces all of the company's hospitals in the Tropics, and the medical service rendered aboard its many ships.

The medical department of this progressive company has been placed under one head, a chief medical officer, whose headquarters are in the city of New Orleans. From the annual report of the company the following interesting data has been taken:

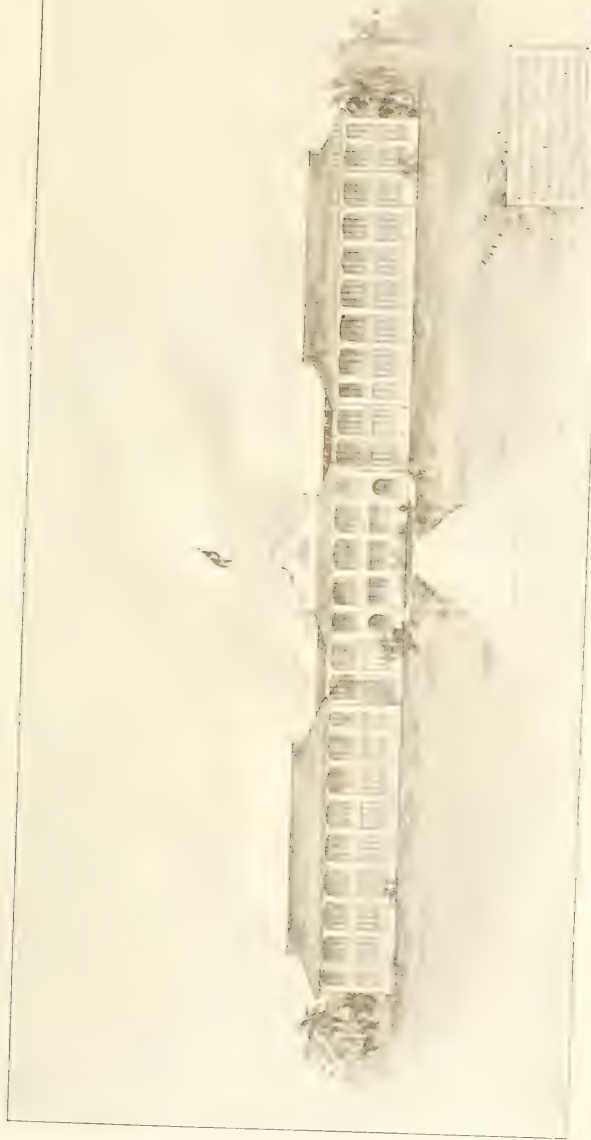
There were dependent upon the company's medical service during the year 1914 42,636 people; there were admitted at all hospitals 10,383; hospital deaths were 306; there were treated at all dispensaries and sick camps 52,082, and on steamships 14,467; medical and surgical attention was rendered to a total of 77,939 persons.

There was an authorized expenditure for the year of \$300,000 for the maintenance and support of the medical department. The total investment in hospitals alone is over \$300,000, and at present there are in course of erection two new structures at a total cost of \$75,000, one at Quetzaltenango, Guatemala, and one at Santa Marta, Colombia. In the near future there will be provided a new hospital at Bocas del Toro, Panama, to replace the present building, which, due to extensive development,



TYPE OF BUILDING ADOPTED FOR GENERAL USE AT LIMON, COSTA RICA

The upper picture will give an idea of the general improvements, while the lower one offers a closer inspection of the structural and fully equipped appearance of the building.



VIEW OF THE NEW YORK STATE HOUSE, ALBANY, N. Y.

THE NEW YORK STATE HOUSE, ALBANY, N. Y. WAS BUILT IN 1802, AND IS ONE OF THE MOST BEAUTIFUL AND SPACIOUS OF OUR PUBLIC BUILDINGS.

IT WAS DESIGNED BY THE ARCHITECT, JAMES HENRY RAYMOND, AND WAS BUILT AT A COST OF \$1,000,000.

THE BUILDING IS NOW USED AS A SENATE CHAMBER, AND AS A PLACE FOR THE DEBATE OF LEGISLATION.



SCENES IN BOCAS DEL TORO, PANAMA, BEFORE AND AFTER SANITATION

has become too small for our requirements. We shall also erect a new structure at Preston, Cuba, and also in Honduras, where large areas have recently been purchased.

We have employed to conduct our medical service 48 surgeons and a large staff of practicanes, dispensers, and trained nurses. Each division medical department is in charge of a superintendent who, in all cases, is a qualified medical officer; and the department as a whole is directed by its general superintendent. All purchases for various hospitals and for medical equipment for our steamships are made through the latter officer. Sanitation and quarantine matters are also directed by him, and the results of the entire service speak for efficiency, as not a single quarantinable disease has appeared the past year in any division of our company, nor has a single case appeared on any one of our 72 steamships operated by the company.

In view of the vast holdings of the United Fruit Co. in several Republics of the Caribbean, it may be interesting to our readers to go more into detail and thereby note some of the important steps the company is taking. In Guatemala a new purchase of nearly 100,000 acres of fertile land is providing employment for a large number of people, and negotiations are pending for the sanitation of the port of Barrios on the Caribbean; a pier 1,000 feet long is under construction, and 40 miles inland, at Quirigua, a hospital has been recently completed which is expected to meet the demands for a number of years. In this section the company has enrolled about 5,000 employees who, with their families, are dependent upon the company for medical aid.

The division of Santa Marta, Colombia, has had a medical department for several years, but recently, owing to the purchase of large banana farms, hospitals and dispensaries have been erected at Río Frio, Sevilla, and Aracataca. Ground has been broken near Santa Marta for a concrete structure capable of accommodating 200 patients. The building will be complete in every detail and more than 6,000 people will be dependent upon the company for medical attention. Santa Marta holds a most promising future from a sanitary standpoint, as the climate locally is dry and, like all irrigated properties, provides fewer breeding places for mosquitoes than does a country where a heavy rainfall is the rule.

In Cuba the company has large holdings. The labor question, the officials say, presents difficulties not found in other countries, for many of the laborers are transient and come and go with the crop, necessitating extraordinary vigilance in order to maintain the standard of good health. During the recent infection of Habana with bubonic plague the company's officials cooperated with the officials of the Cuban Government and successfully prevented the general spread of the dreadful disease. Seven thousand employees of the company in this section are quite as healthy as those of any large organization in the United States.

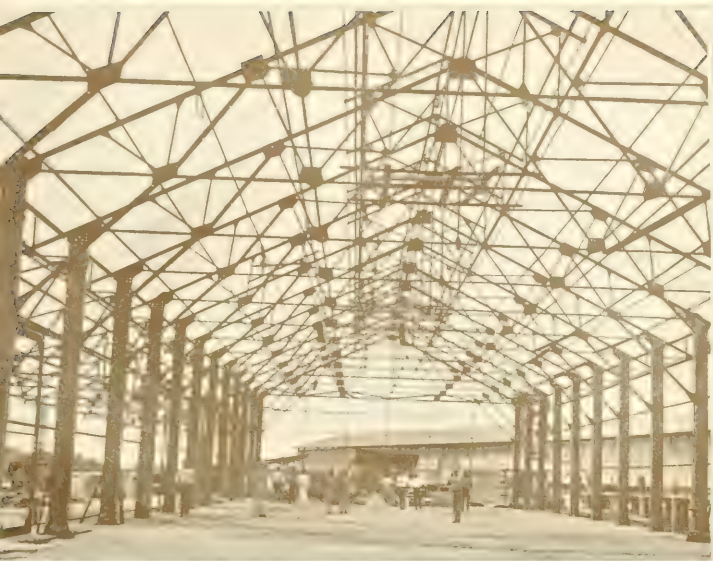
Commenting on the subject of plague in the United States the *Journal of the American Medical Association* has the following to say:

A larger portion of the tropical trade enjoyed by the Atlantic and Gulf ports is what is known as "green fruit" trade. This industry is enormous, and is increasing daily,



HOSPITAL FACILITIES AT BOCAS DEL TORO, PANAMA.

In the upper picture a general view is given of the hospital for first-class patients. This up-to-date building is surrounded by tropical trees and flowers, and its able staff of physicians has an enviable reputation. The lower picture shows the type of sick cottage adopted for general use in the vicinity and elsewhere.



SUPERSTRUCTURE OF CONCRETE AND STEEL RAIL-PROOF HERE AT ALMIRANTE, PANAMA



VIEW OF COMPLETED RAIL-PROOF HERE AT ALMIRANTE, PANAMA, WHICH IS AN EXCELLENT
WORK OF A WONDERFUL RAIL-PROOF IN THE ENGINEERING FIELD

and tribute must be paid to the principal interests engaged in this trade for the adoption of a rigorous sanitary policy in dealing with all classes of tropical affections, special attention being given to the problems of plague and yellow fever. Through the general superintendent of the medical department of the United Fruit Co. stringent regulations dealing with ship sanitation and fumigation are enforced. Each ship of the company carries a well-trained man, who is especially conversant with tropical conditions. In addition to caring for the welfare of passengers the surgeons are practiced in ship sanitation and fumigation. The rat-killing crusade under the supervision of Dr. Swigart is very commendable of that branch of latter-day science known as preventive medicine.

The New Orleans Medical and Surgical Journal says:

Of particular importance to Louisiana and the South is the announcement that the whole medical service of the United Fruit Co. will cooperate with the department of tropical medicine and hygiene of Tulane University, with a view of not only improving the hospital service but of affording valuable material for the work in the department of tropical medicine.

"Quarantine," which for many years was a sobriquet for yellow fever, is now a commonplace term with no unpleasant significance. The traveling public at last understands that many of our southern cities are as well sanitized and cleaned as those of other countries. To the seeker of pleasures and recreation the shores of the Caribbean countries no longer harbor the dreaded diseases which for so long have been associated with the ports of that interesting section of the world.



THE PAN AMERICANISM OF HENRY CLAY

WHEN, on February 9, 1852—at the sunset of his long and useful life—Henry Clay's admiring friends presented him with a gold medal, on the reverse of which were inscribed the dates by which he wished to be remembered, the 2 of the 14 that had the most prominent place were: Spanish America, 1822; Panama Instructions, 1826.

The visitor to the capital of the United States of America sees hanging in one of the large corridors near the meeting place of the House of Representatives a large portrait of Henry Clay, with his index finger pointing to South America on a large globe of the world. It was thus that he wished the future lawmakers of his country—those who would control its destiny—to remember him.

This is the man to whom the distinguished Argentine author, Dr. Miguel Cané, in his introduction to the 1905 edition of President Roque Saenz Peña's speeches, says that a statue should be erected in every South American capital, and that his name—the name of the “noble and kind-hearted Clay”—should be on one of the streets of Buenos Aires.

Let us see on what actions these fellow Pan Americans, 6,000 miles away, base their regard for the great Kentuckian who has been dead, but not forgotten, for 60 years.

On January 29, 1816, while the South American wars of independence were raging, Henry Clay, who was then Speaker of the House of Representatives of the United States of America, opposed, in a long speech, the reduction of the taxes imposed as a consequence of the War of 1812 because, among other reasons, the United States might have openly “to take part with the patriots of South America.” Nearly a year later, on January 24, 1817, he vigorously opposed a bill intended to stop the fitting out of armed cruisers in United States ports, on the ground that it might be disadvantageous to the South Americans, who were still nobly maintaining their struggle for freedom.

But it was on March 24, 1818, that his soundest and most historically Pan American speech was delivered in the House of Representatives—when he besought the aid of the United States for their fellow-Americans, for “18,000,000 of people struggling to burst their

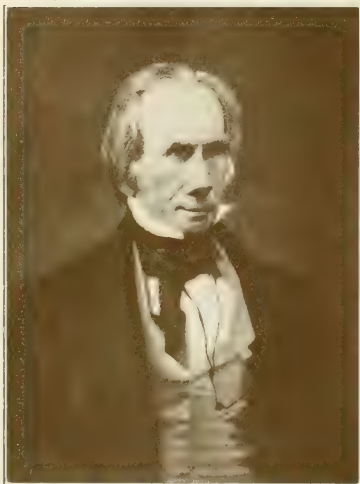
chains and be free." The nature of this classic oration can be judged from the following extracts:

In the establishment of the independence of Spanish America the United States have the deepest interest. I have no hesitation in asserting my firm belief that there is no question in the foreign policy of this country which has ever arisen, or which I can conceive as ever occurring, in the decision of which we have had or can have so much at stake. This interest concerns our politics, our commerce, our navigation. There can not be a doubt that Spanish America, once independent, whatever may be the form of the governments established in its several parts, these governments will be animated by an American feeling and guided by an American policy. They

will obey the laws of the New World, of which they will compose a part * * *

We are their great example. Of us they constantly speak as of brothers, having a similar origin. They adopt our principles, copy our institutions, and, in many instances, employ the very language and sentiments of our revolutionary papers.

But it is sometimes said that they are too ignorant and too superstitious to admit of the existence of free government. This charge of ignorance is often urged by persons themselves actually ignorant of the real condition of that people. I deny the alleged fact of ignorance; I deny the inference from that fact, if it were true, that they want capacity for free government; and I refuse assent to the further conclusion, if the fact were true and the inference just, that we are to be indifferent to their fate. All the writers of the most established authority, Depons, Humboldt, and others, concur in assigning to the people of South America great



HENRY CLAY (1777—1852).

During his long years of public service he was always a warm friend of the Latin-American countries, and displayed a keen interest and kindly sympathy in their struggles for independence.

quickness, genius, and particular aptitude for the acquisition of the exact sciences and others which they have been allowed to cultivate. In astronomy, geology, mineralogy, chemistry, botany, and so forth, they are allowed to make distinguished proficiency. They justly boast of their Abzate, Velasquez, and Gama, and other illustrious contributors to science. They have nine universities, and in the City of Mexico, it is affirmed by Humboldt, there are more solid scientific establishments than in any city, even in North America. I would refer to the message of the Supreme Director Pueyrredón of La Plata * * * as a model of composition of a state paper, challenging the comparison with any, the most celebrated, that ever issued from the pens of Jefferson or Madison.

We may safely trust to the daring enterprise of our merchants. The precious metals are in South America, and they will command the articles wanted in South America, which will purchase them. Our navigation will be benefited by the transpcrtation,

and our country will realize the mercantile profits. Already the item in our exports of American manufactures is respectable. They go chiefly to the West Indies and to South America, and this item is constantly augmenting.

How clearly the allusions in this speech show Clay's carefully concise study of Latin American history and conditions. Joaquín Velasquez (July 21, 1732-Mar. 6, 1786) was one of the most distinguished of the many noted astronomers whom Mexico has produced. He was the author of many valuable works on Mexican and Californian natural history and mineralogy. His astronomical observations in California, which are among the very first in that part of the world where the great Lick Observatory now continues his labors, are especially noteworthy in view of his observations of the transit of Venus on June 5, 1769. His labors in connection with the topographical and geodetic survey of the valley of Mexico, with whose superintendence he was charged in 1774, are the basis of all the excellent system of surveys for which our sister Republic of Mexico is noted. In 1783 he established in Mexico the first school of mines in North America.

It is interesting to note that the newspapers of South America even then showed their appreciation of the friendly sentiments expressed in the United States. For instance, No. 142 of "El Censor" of Buenos Aires for Saturday, June 6, 1818, contains a long extract from the Baltimore Patriot and Mercantile Advertiser of March 28 on the debates in the House of Representatives on March 24, 1818, in which Clay's name figures prominently.

But Henry Clay's efforts did not stop with this speech. On May 20, 1820, he introduced a motion into the House of Representatives to inaugurate diplomatic intercourse with "any of the Governments in South America which have established and are maintaining their independence of Spain." It passed by a vote of 80 to 75. On February 6, 1821, Clay secured the passage of a resolution by the House of Representatives "that the House of Representatives participate with the people of the United States in the deep interest which they feel for the Spanish Provinces of South America, which are struggling to establish their liberty and independence, and that it will give its constitutional support to the President of the United States whenever he may deem it expedient to recognize the sovereignty and independence of the said Provinces," the first clause of this important legislative decision being passed by a vote of 134 to 12, and the second by a vote of 87 to 68. As a result of this action, President Monroe sent a special message to Congress on March 8, 1822, and "A resolution to establish foreign intercourse with the independent Nations of South America" was passed by a vote of 159 to 1. This measure became a law on May 4, 1822; and on June 20, 1822, Secretary of State John Quincy Adams proposed to President Monroe that the mission of the United States of America to the Republic of Colombia should be offered to

Henry Clay. He informed the President that "The Republic of Colombia, and particularly Bolivar, with whom Clay has been in correspondence, will be flattered by his appointment, or even by information that he had the offer of it. In the relations to be established between us and that Republic, Mr. Clay's talents might be highly useful," and the President appeared to be well disposed toward this suggestion.

An important event in Pan American history had occurred the day before which rendered it imperative that the mission of the United States to the sister Republic of Colombia, in whose beautiful city of Bogota the patriot Antonio Narino had portraits of Franklin in his house as early as 1793, should be filled as soon as possible. It was on June 19, 1822, that the first formal act of recognition of the South American Government took place when Secretary Adams presented Mr. Manuel Torres to President Monroe as chargé d'affaires from the Republic of Colombia, at the White House. Mr. Adams notes in his diary that "Torres was deeply affected by it. He spoke of the great importance to the the Republic of Colombia of this recognition, and of his assurance that it would give extraordinary gratification to Bolivar."

It was certainly gratifying to President Monroe. He invited Torres, who was then very ill (he died in Philadelphia on July 15, 1822, in great distress) to be seated, sat down by him, and spoke to him with kindness "which moved him even to tears." He assured him of the great interest taken by the United States in the welfare and success of his country, and of the peculiar satisfaction with which he received him as its representative.

On this very 19th of June a letter was written by Capt. Eugenio Cortes, of the Mexican navy, to Henry Clay, inclosing one from the Emperor Augustin Iturbide, which shows how Clay was regarded in Latin America:

Eugenio Cortes to Henry Clay.

PHILADELPHIA, June 19, 1822.

The honorable HENRY CLAY:

I have the honor to deliver to you the inclosed letter from the supreme chief of the Mexican Empire, who directed me to present it to you personally, as a testimony of the gratitude, esteem, and distinction which the supreme chief of the Mexican Nation entertains for the virtues, talents, and services displayed by you in favor of the just cause sustained by all the States of South America to gain their independence.

Iturbide to Henry Clay.

MEXICO, May 6, 1822.

MY DEAR SIR Through the means of Naval Captain Eugenio Cortes, I have been informed of the great services by which you have furthered the success of his commission and contributed to the prosperous advantages that resulted from it. This generous course, the fruit of this enlightened age, excites my gratitude and obliges me to give you my most sincere thanks and offer you my friendship. For this philanthropic conduct that emanates from a liberal education, and whose end is the civilization of nations, though it relates to the whole Mexican Empire, if its success

should be in proportion to its promise. I offer you the portrait which is due to you by all, and my most particular thanks for the present of books and for the value you set on my portrait. In exchange for it, I am awaiting for yours, which is announced by our common friend Cortes, and without seeing it, it gives me satisfaction, from that common effect which can not be explained, in which men reciprocally love without knowing each other, in which the mind forms favorable prepossessions and gives to the person (for so it delights in) as many virtues as it pleases and takes for certain that which it conjectures and goes so far as to give to the portrait expression and gestures. But our case is different from this — your works are distinguished; my correspondence is a debt of justice to their merit, and I promise myself the continuance of duties so praiseworthy and assure you of reciprocating in like circumstances.

A year later we find a similar Pan-American manifestation in the following letter written to the *chargé d'affaires* of the United States of America from the House of Representatives of the Republic of Colombia, eager to show its appreciation of the cooperation of one of the most prominent men in the country which the distinguished Ecuadorian Rocafuerte called "The sister Republic of the North," and whose people the great Argentine statesman Pueyrredón called "brothers."

HOUSE OF REPRESENTATIVES,

Bogota, April 25, 1823.

To Mr. C. S. Todd, *Chargé d'Affaires*.

The House of Representatives has received with the most lively sense of gratitude the valuable present you have had the goodness to offer. (An engraved portrait of Henry Clay). It duly appreciates the generous sentiments manifested in the address with which you accompanied it, sentiments very worthy of the country of Washington and Franklin.

The House will not fail to pay that profound tribute of respect which is due to the honorable Henry Clay, the intrepid advocate of the cause of Colombia; and while it reserves to itself [the occasion of manifesting in a more conspicuous manner the high esteem of which he is worthy, you will condescend to communicate to him the wishes which the House cherishes for the prosperity of the United States.

God guard you.

(Signed)

DOMINGO CAYCEDO,

President of the House.

It was at this time that engraved portraits of Henry Clay, with extracts from his speeches advocating South American independence, were scattered broadcast about the leading cities and towns of South America. One of these, published in Buenos Aires, now hangs on the walls of the United States legation in that beautiful Argentine capital.

In 1846 the English traveler, Mrs. Sarah Mytton Maury, notes in her "Statesmen of America" that "The following correspondence between Bolivar and Mr. Clay is full of interest; it exhibits the unwearied and benevolent efforts of the latter in the cause of universal freedom."

The correspondence alluded to was as follows:

THE HOUSE OF REPRESENTATIVES,

SIR: I can not omit availing myself of the opportunity offered me by the departure of Col. Watts, *chargé d'affaires* of the United States, of taking the liberty of addressing

your excellency. This desire has long been entertained by me for the purpose of expressing my admiration of your excellency's brilliant talents and ardent love of liberty. All America, Colombia and myself, owe your excellency our purest gratitude for the incomparable services you have rendered to us by sustaining our cause with a sublime enthusiasm. Accept, therefore, this sincere and cordial testimony, which I hasten to offer to your excellency, and to the Government of the United States, who have so greatly contributed to the emancipation of your southern brethren.

I have the honor to offer to your excellency my distinguished consideration.

Your excellency's obedient servant,

BOLIVAR.

WASHINGTON, October 27, 1828.

SIR: It is very gratifying to me to be assured directly by your excellency that the course which the Government of the United States took on this memorable occasion, and my humble efforts, have excited the gratitude and commanded the approbation of your excellency. I am persuaded that I do not misinterpret the feelings of the people of the United States, as I certainly express my own, in saying that the interest which was inspired in this country by the arduous struggles of South America arose principally from the hope that, along with its independence, would be established free institutions, insuring the blessings of civil liberty. I can not allow myself to believe that I will not doubt that your excellency will, in due time, render a satisfactory explanation to Colombia and the world, of the parts of your public conduct which have excited any distrust; and that, preferring the true glory of our immortal Washington to the ignoble fame of the destroyers of liberty, you have formed the patriotic resolution of ultimately placing the freedom of Colombia upon a sure and firm foundation. That your efforts to that end may be crowned with complete success I most fervently pray.

I request your excellency will accept assurances of my sincere wishes for your happiness and prosperity.

H. CLAY.

When Henry Clay became Secretary of State of the United States of America in March, 1825, a broader sphere of Pan American activity was presented to him. His zeal to promote the brotherhood of the American nations had now wider opportunities, and his responsibility was great in furthering what must be regarded as one of the main purposes of his useful and constructive life. His efforts to make the Congress of Panama in 1826 a success from a truly Pan American point of view are typical of his sustained interest, which marks him as the precursor of James G. Blaine, Joaquim Nabuco, and many other great Pan Americans whose glad influence leads us to follow and imitate them.

As soon as the intention of Simon Bolivar to hold this first parliament of all the Americas, which had been urged as early as 1810 by Juan Martínez de Rosas in Chile, and by the Junta of Caracas in Venezuela, and had since been promoted by San Martín, and Unanue in South and Valle in Central America, became known to him, he bent all his official and personal energies toward that end. As the historian Schouler says, "His zeal won President John Quincy Adams's favor to the plan and dissolved the doubts of his fellow advisers." Not all of them could have doubted; Rush, the Secretary of the Treasury, had been most Pan American in his conduct as

United States minister to England; and Attorney General William Wirt had expressed himself as the friend of his fellow Americans. Clay frequently consulted with Señor Obregon, the Mexican minister, as well as with Señor Salazar, the Colombian minister, and the other Latin American representatives in Washington, including Gen. Carlos de Alvear from Buenos Aires, to whom, by the way, the first special passport ever issued by the State Department was granted.

In 1827 the young Fernando Bolivar, nephew and ward of the great Liberator, who had him educated in the United States of America, at Germantown, Pa., and at the University of Virginia, was introduced by Judge Peters to Henry Clay. Forty-six years later he noted in his *Reminiscences* the impression that Clay's tall, slender, and impressive figure and penetrating blue eyes made on him. We can be very sure that when Fernando returned to Bogota, where his illustrious uncle was then living, he told him of his meeting with his great fellow Pan American; and, as Bolivar and Clay had long been in correspondence, any news direct from the north must have been doubly agreeable to the great Caraqueno.

It is not generally known that, in his efforts to have as important a delegation as possible from the United States at that momentous gathering, he urged Albert Gallatin, one of the most distinguished citizens of the United States, who had been for 13 years Secretary of the Treasury, and was soon afterwards appointed minister to England, to be one of the representatives of the United States of America at Panama. Gallatin's reply to Clay's offer of this mission, written on November 14, 1825, breathes the Pan American spirit:

No one can be more sensible than I am, both of the importance of laying the foundation of a permanent friendship between the United States and our sister Republics, and of the distinguished honor conferred on the persons selected to be the representatives of our glorious and happy country at the first congress of the independent powers of this hemisphere.

Secretary Clay was very careful to choose able and distinguished men for all of his Latin American appointments. Poinsett and Forbes, at Mexico and Buenos Aires, were among the first trained diplomatists of the United States of America. William Henry Harrison, who was sent to Bogota, was afterwards President of the United States of America. Condy Ragnet, at Rio de Janeiro, came of a well-known Philadelphia family, and was himself prominent. A beautiful piece of furniture given him by Don Pedro I of Brazil, now in the possession of the family of the writer, shows how he was appreciated in that great Portuguese-speaking country. William Tudor, at Lima, and Herman Allen, in Chile, were prominent merchants whose talents were needed on the busy west coast.

It is a beautiful and inspiring touch of the many-sided character of Henry Clay that so much of his public service should have been so inspired by Pan Americanism.

PAN AMERICAN NOTES

VISIT OF THE BRAZILIAN MINISTER OF FOREIGN AFFAIRS.

THE announcement that Senhor Lauro Severiano Müller, the minister of foreign affairs of Brazil, is to visit the United States in the latter part of May, has received considerable notice, not only in the United States but in Europe. While it is understood that he is returning the visit made by Honorable Elihu Root, Secretary of State of the United States, to Brazil in 1906, his presence in the United States will serve to attract special attention to the growth and progress of Brazil as one of the leading Republics of the Western Hemisphere, and as a country of to-day which is moving forward with remarkable rapidity into a position of a world power. Senhor Müller ranks as one of the foremost men in public life of the Western Hemisphere and has had a remarkable career. Only about 50 years old, having been born in 1863 in the Province of Santa Catharina, of German parents, he entered the military school in 1882 and distinguished himself there. In 1889 he was one of the organizers of the movement which proclaimed the Republic. Shortly afterwards he was nominated provisional governor of the State of Santa Catharina, and later sent as a representative to the Federal Constituency, where he took part in the commission presided over by Ubaldo do Amaral, who elaborated the Republican Constitution of February 24, 1891. When the revolution of the fleet and of Rio Grande do Sul occurred in 1893 he fought under the orders of Gen. Gomes Carneiro for the defense of the Government of Marshal Floriano Peixoto although in the Chamber the latter was his opponent in politics. He has served as Deputy and Senator in the National Congress as a representative of the State of Santa Catharina. In 1902 he was appointed minister of industry, communications, and public works, and he has been associated with the accomplishment of some of the most useful and extensive of the great public works of Brazil, especially railway and port projects. When President Rodrigues Alves retired, Senhor Müller made an extended trip to Europe, but upon returning he reentered the Senate and was reelected a member of the commission of finances. He was one of the strongest supporters of the candidacy of Marshal Hermes da Fonseca to the presidency, and subsequently of his Government, and in the natural order of events became minister of foreign affairs following the death of Baron do Rio Branco. He will surely receive a most cordial welcome in the United States.



DR. FAURO MÜLLER.
München, 1892. A. 1. 1. 1.

PAN AMERICAN EDUCATIONAL MATTERS.

The efforts of the Pan American Union to promote interest among the universities, colleges, academies, normal and high schools of the United States in the Latin American countries are bearing encouraging fruit. Institution after institution, which heretofore has given little attention to the Spanish or Portuguese language or to the history or progress of the South and Central American countries, is reporting to the Pan American Union that it is taking up these subjects. Such communications are often accompanied by requests for lists of books for libraries, names of lecturers, and for other information which may be helpful in making the necessary changes in their courses of study. The number of young men coming from all the Latin American countries to study in the educational institutions of the United States is increasing, and, correspondingly, there is a growing desire among young college graduates or students of the United States to continue or take part of their studies in the leading colleges of Central or South America, in order to get a more accurate knowledge of those countries. There is, moreover, growing a widespread belief that a general exchange of college professors between the colleges of the United States and those of Latin America will be beneficial in promoting good relations and closer acquaintance. In this connection it may be interesting to the constituency of the BULLETIN to know that the governing board of the Pan American Union is considering carefully the advisability of establishing a section of education in this office which will provide full information on all educational topics relating to the different American Republics. It is hoped to have this section established and in working order during the coming fiscal year.

SOLEMN MASS FOR LATE PRESIDENT BONILLA.

A solemn and impressive high mass was celebrated on Friday morning, April 18, at St. Matthew's Catholic Church, Washington, D. C., in honor of the lamented Gen. Manuel Bonilla, President of the Republic of Honduras, whose demise occurred on March 21, 1913. President Bonilla was inaugurated Chief Executive of Honduras on February 1, 1912, and had served but a little over a year when he suddenly passed away. During the brief period of his administration, however, many progressive ideas were launched and there were general evidences of prosperity throughout the country. While Tegucigalpa, the capital city of Honduras, was still in grief and with other neighboring countries of Central America decreeing periods of official mourning in respect to the dead, this special service in Washington was arranged by the Honduran minister, Sr. Dr. Alberto Membreno. Special invitations were issued to President

Woodrow Wilson, Vice President Marshall, members of the Cabinet, the resident diplomatic corps, officials of the Department of State, the Director General and Assistant Director of the Pan American Union, to a number of the Latin American colony and others prominent in the social life of the Capital. It was indeed significant of the friendly relations existing between the United States and the Latin American countries that President Wilson, canceling previous appointments, attended the memorial services and remained until the conclusion with Vice President Marshall. The Department of State paid its respects by the presence of Secretary Bryan and several officials from that department. There were also present many diplomats, especially from the Latin American countries. A number of those in attendance were accompanied by their wives and ladies. The services were conducted by Mgr. Thomas S. Lee, rector of St. Matthew's Church. Mgr. Lee was assisted by several other high dignitaries of the church, including Mgr. William T. Russell, rector of St. Patrick's Church; Mgr. James E. Mackin, rector of St. Paul's Church; Rev. David Ramos, of the Franciscan Monastery; and the Rev. John M. Cooper, of St. Matthew's Church.

THE FOREIGN TRADE OF ARGENTINA.

The Argentine Republic can well be proud of its foreign trade record for the year 1912, when the total value of its exports and imports far exceeded that of any preceding year. This is evidence of the remarkable prosperity and progress of that country. One of the most interesting features of this growth of trade is its large per capita rate, amounting to nearly \$120 per capita for each inhabitant of the Argentine Republic. Only one or two countries of the world, possibly Holland and Belgium, can show a larger per capita commerce than this. During 1912 Argentina's exports were valued approximately at \$466,000,000 and her imports at \$374,000,000, making a total of \$840,000,000. This is all the more remarkable when we compare it with that of 1911, when the value of her foreign commerce was \$671,000,000, giving an increase for 1912, or in one year, of \$169,000,000. The share of the United States in the Argentine trade of 1912 was: Exports to Argentina, approximately, \$57,000,000; imports from Argentina, approximately, \$32,000,000; or a total of \$89,000,000.

LECTURERS IN SOUTH AMERICA.

The number of lecturers and special writers who are either going to Latin America or planning to make the trip is constantly increasing. Letters are being received nearly every day by the Director General from men of this class who wish to make a careful tour, either of all of

the Latin American countries or of special ones, for the purpose of studying them carefully and then returning to deliver lectures or write about them. The latest accession to this group is Mr. Peter MacQueen, the well-known traveler and lecturer, who sailed for Buenos Aires on April 26. Mr. MacQueen has traveled extensively in Asia, Africa, and Europe, and has long been known as one of the interesting lecturers of the country. He has a large personal acquaintance with leading men of different lands, and it is to be hoped that much benefit may result from his coming trip to the South American countries.

MEETING OF THE ENGINEERING CLUB.

One of the most brilliant and perhaps important gatherings that has ever assembled under the auspices of the Engineering Club (Club de Engenharia) of Brazil was held at the clubhouse of that organization in Rio de Janeiro on February 19, 1913. The occasion of the meeting was the formal presentation to the Chief Executive of Brazil of the prizes which the splendid exhibits of that country won at the International Rubber Exposition of 1912, held at New York in the fall of that year. The other feature of interest was an address delivered by Mr. Algot Lange, who has attracted considerable attention by his book, "In the Amazon Jungle," dealing with his remarkable explorations in the upper Amazon regions. The meeting was attended by President Fonseca, several members of his cabinet, distinguished officials of the army and navy, and a large gathering of prominent members and guests. In a happy address, Admiral José Carlos de Carvalho, who assisted at the rubber exhibit, presented to the President the gifts awarded to Brazil, which he stated he received from the hands of the distinguished Brazilian ambassador in the United States, Sr. Domicio da Gama. The admiral also spoke of the two great engineering projects which he visited while in the United States, the Florida East Coast Railway, with its wonderful aqueducts, and the Panama Canal. He then presented Mr. Lange, who is now in Brazil effecting negotiations to continue his exploration in the upper Amazon. Mr. Lange virtually recounted the most striking of his experiences as related in his book.

CORRESPONDENCE REGARDING CHILE.

The prospective opening of the Panama Canal is greatly increasing the correspondence of the Pan American Union in regard to the countries on the western or Pacific side of Latin America. These inquiries are pouring in not only from the United States but from



PROBATIONER

MAJOR JOHN M. M. M. M.

U. S. ARMY, 1864-1865

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Europe and even from Asia. They are in regard to all of the 12 countries which form the Latin American coast line from northern Mexico south to southern Chile. They are most interesting as showing the variety of information which is sought and the new attention which these countries are exciting. Recently a memorandum was made up in this office of 100 letters which have been received asking about Chile; they cover questions in regard to agriculture, mining, climate, educational institutions, exports, imports, business opportunities, railroads, steamships, tariffs, universities, colleges, history, laws, immigration, manufacturing, newspapers, advertising, insurance, social and economic problems, etc. These letters also ask for books, pamphlets, and publications descriptive of Chile, and it is hoped that in the near future the Chilean Government may see fit to authorize a new edition of the handbook on Chile, the supply of which is now exhausted.

AN ENGLISH MAGAZINE IN PARAGUAY.

In a recent number of the BULLETIN attention was called to the growing interest in the Spanish language in this country and the reciprocal interest in the English language throughout Latin America. While the number of Spanish newspapers and magazines published in the United States has been increasing to a remarkable degree, the corresponding increase of similar publications in the English language throughout Latin America, though less rapid, has nevertheless been steady and constant. The latest periodical to come to the notice of this institution, printed in English, is a pamphlet entitled "Paraguay," which is now in its first volume, fifth number. It is published in Asuncion, the capital of Paraguay, and is devoted to matters dealing with the economic and industrial resources of that country. It is gratifying to note this increasing interest in the English language as evidenced by the press, since closer relations between the countries of the Western Hemisphere must mean more intimate intercourse and better understanding, and these ends can best be served by a knowledge of each other's language, customs, and people. The Pan American Union extends its compliments to the editor, W. H. Truss, and offers its best wishes in this new undertaking.

URUGUAYAN EXPERTS IN THE UNITED STATES.

The visit to the United States of several prominent citizens of Uruguay for the purpose of making special studies of certain phases of the economic and educational systems, forcibly directs attention to the constant progress and advancement which characterize the Oriental Republic of Uruguay. For the past few weeks Sr. Don

Enrique Reyes, of Montevideo, has been in Washington making careful observations of the school systems at the Capital. Sr. Reyes has been officially commissioned by the Government of Uruguay for this duty, and upon completion of his studies at Washington he will proceed to Philadelphia, New York, Boston, and possibly several other large cities in the East, and then make similar tours of inspection out West. From the United States Sr. Reyes will go to Europe also to conduct similar studies for comparative purposes. Sr. Reyes is more especially interested in the organization of primary schools, and also in reform schools and institutions for young delinquents. Another welcome visitor to this country is Sr. Don Santiago Rivas, president of the Mortgage Bank (Banco Hipotecario), one of the most important financial institutions in Uruguay. Sr. Rivas has just completed a tour of the principal European capitals where he has been studying the banking systems. While in the United States he plans to have conferences with prominent men in the financial world relative to international banking and currency problems. The Banco Hipotecario was formerly a private enterprise, but about a year ago its operation was taken over by the Government and nationalized. Its object is to grant loans to small farmers and agriculturists, and in this way encourage colonization, assist the small landholder, and thus tend to enrich the whole country.

YALE UNIVERSITY AND LATIN AMERICA.

As evidence of the increasing interest which the universities and colleges of the United States are taking in Latin America, there can be cited the circulars in Portuguese and Spanish which have been issued by Yale University for distribution among young men in the Latin American countries who may possibly desire to attend some university in the United States. These circulars call attention to the location of the university, its attention to the study of Latin languages, history, and literature, its willingness to accept the Spanish or Portuguese language instead of French or German for entrance requirements, and in other ways to assist students. Incidentally, the circular refers to Senator Elhu Root and Archbishop John Ireland, and it is signed by Anson Phelps Stokes, the secretary of the university.

PANAMA PAST AND PRESENT.

One of the most interesting and useful books in regard to the Panama Canal which has come to the attention of the Director General is that entitled "Panama Past and Present," written by Farnham Bishop, the son of Joseph Bucklin Bishop, secretary of the Isthmian

Canal Commission. It covers the subject in a complete way, taking up the geographical-historical side of the story as well as a record of the present achievement. The illustrations are all excellent, while the text has been prepared, as can be readily seen by perusing it, with special care. Mr. Bishop is a bright, interesting writer and has a keen sense of observation, which he reflects in his story. It is published by the Century Co. of New York.

MEDAL FOR THE STUDY OF SPANISH.

The Latin American students at the Louisiana State University are to be congratulated on the plan that they have adopted to increase interest among the student body in the Spanish language. There are between 40 and 50 students from the various countries of Latin America at the university, and several years ago they organized the Sigma Iota fraternity. Since 1910 that fraternity has been giving a gold medal to one of the non-Spanish speaking students who has shown the greatest proficiency in the Spanish language. The first year the prize was offered it was won by one of the young lady students, and in 1911 it was awarded to Mr. Charles P. Harrington, who has since become an instructor in Spanish at that university. Mr. Harrington has been very active of late in his efforts to induce the high schools throughout the Southern States to include the Spanish language in the curriculum and has contributed several forceful articles on the subject to various publications.

APPOINTMENT OF PAN AMERICAN COMMITTEE OF URUGUAY.

Very soon after the adjournment of the Fourth International Conference of American Republics which met in Buenos Aires in 1910, a majority of the American Republics, in pursuance of the recommendation of Article X of the resolution on the reorganization of the Union of American Republics, appointed Pan American committees. These committees, as recommended by the resolution, were to be selected in each of the countries and to be subordinate to the foreign affairs department of the particular country. Their duties were, broadly, to secure the approval of the resolutions adopted by the International American Conference, to present new projects and ideas of value in carrying out the purposes of the Union, to maintain relations with the Pan American Union in Washington and with the work of the latter in the particular country, and to supply the Pan American Union with the necessary data, publications, and other information needed in its work. The appointment of a committee in Uruguay has been heretofore postponed. However, on February 12, 1912, President Batlle y Ordoñez signed a decree naming the following to

serve as the Uruguayan Pan American committee, as recommended by the Buenos Aires Conference. Dr. Juan Zorrilla de San Martín; Dr. José Espalter; Dr. Jacobo Varela Acevedo; Dr. Scapio de Castillo; Dr. Aristides Dellepiane, secretary. The appointment of this committee will be of great service to the Pan American Union and to the general purposes of the International Union of American Republics.

THE FOURTH AMERICAN PEACE CONGRESS.

In the first week of May there was held in St. Louis, Missouri, the Fourth American Peace Congress, which was one of the most notable occasions of its kind which has been held in the United States. It was attended by Andrew Carnegie, several Latin American members of the Diplomatic Corps, and by other men of prominence and authority not only of the United States but of foreign countries. President Woodrow Wilson was honorary president, while ex-President William H. Taft and Secretary Elihu Root were honorary vice presidents. The actual president was Richard Bartholdt, Member of Congress from St. Louis, while the actual vice presidents were Speaker Champ Clark; Senator Theodore E. Burton, of Ohio; Andrew Carnegie; Secretary William Jennings Bryan; Oscar S. Strauss, and John W. Griggs. The chairman of the executive committee was James E. Smith; the executive secretary, Walter B. Stevens, and the chairman of the program committee, Manley O. Hudson.

A LITTLE BROCHURE ON THE PANAMA CANAL.

An interesting little brochure which has come to the attention of the Pan American Union is that entitled "The Panama Canal," written by Duncan E. McKinley, who was formerly a Member of Congress and visited the canal with the Interstate Commerce Committee of the House of Representatives. The little book contains about 40 pages, handsomely printed and illustrated. It tells the story of the canal in interesting, concise language, and Mr. McKinley is to be congratulated for providing his friends with copies of it. It is a pleasure to have it in the library of the Pan American Union.

PAMPHLET OF MR. CORTHELL.

Another interesting pamphlet which has come to the attention of this office is one written by the famous engineer, Elmer L. Corthell, entitled "Brief of View of Engineering Practice and Personal Experience in Latin America, 1880-1912." This pamphlet is a reprint from the December issue of the "Journal of the Western

Society of Engineers," and contains a large amount of data and information regarding engineering practice in Latin America, which should prove instructive to all those who may be planning to do engineering work in that part of the world.

APRIL IN URUGUAYAN HISTORY.

The month of April is one of the most important periods in the calendar of the year to the Republic of Uruguay, for during that month there occurred several incidents which have had far-reaching effects in the rise and glory of that nation. And particularly is this month to be remembered in the present year for it marks the centennial milestone of salient dates in the history of Uruguay.

It was on April 4, 1813, that Gen. José Artigas, hero, patriot, and statesman, succeeded in assembling the First National Congress of Uruguay (*Primer Congreso Nacional*). This was the primal concentrated move to gather in session a duly organized assembly. At this first meeting one of the chief items of business was the recognition of the Constituent General Assembly, which had been organized in Buenos Aires (*La Asamblea General Constituyente*). The next step was to elect six deputies to attend this assembly at Buenos Aires, as Uruguayan delegates, and these were chosen from the various political divisions of the Oriental Province, as Uruguay was then also called. Two delegates were designated from Montevideo, Dámaso A. Larrañaga and Mateo Vidal; Dámaso Gómez Fonseca was appointed from Maldonado; the representative from Canelones was Felipe Cardoso; Marcos Salcedo was delegate from Santa Lucía and San José; and the sixth delegate was Francisco B. de Rivarola from Soriano.

Classic and historic are the instructions which Artigas delivered to these representatives as they proceeded on their way to Buenos Aires. In all the documents of state which form such important parts in the history of a country these instructions are deserving of a high place. The spirit of freedom, liberality, and independence permeates each of the 10 distinct provisions. The statesmanlike and leadership qualities of the author may be seen in the words of wisdom to these delegates.

The most striking paragraphs of these credentials have been widely copied in subsequent documents of a similar nature, while at the time of their publication they were generally distributed throughout the country as an inspiration to the people who were endeavoring to obtain absolute freedom and independence. The instructions contain a declaration of independence and a form of government; also provisions to seek division of the central power, religious freedom, and personal security; to obtain authority by central power; to secure recognition of a national constitution, a republican form of government, and territorial boundaries; to secure open seaports; to enact

legislation on the status of aliens, fixing fines, regulating seizure of property; to secure the sovereignty, independence, freedom, equality, and security of the Provinces; recognition of provincial constitutions; and matters pertaining to the militia, guarantees against military despotism, etc., were also touched upon.

In fine, the character and scope of the credentials which these delegates carried with them to Buenos Aires were remarkably broad and provided for far-sighted contingencies in the progress of state. They have often been compared to the instructions which George Washington and Thomas Jefferson received from the State of Virginia in 1779, 34 years prior, when the Continental Congress was assembled in the city of Philadelphia.

A SUCCESSFUL PERUVIAN PLAYWRIGHT.

Latin America in an histrionic sense had a striking success and recognition on the afternoon of April 18, at the Columbia Theater in the city of Washington. On that occasion Washington society, official and unofficial, turned out to the extent that the auditorium of this playhouse was packed, to do honor to Sr. Don Alfonso Washington Pezet, son of the distinguished minister of Peru at Washington, and to watch the presentation of his new play entitled "The Remaking of the Raleighs." It is especially pleasing to record the success of this young Peruvian playwright, who has gained encomiums and considerations at the hands of an American audience which are seldom given to any native of the United States. Both the construction of the play and the dialogue showed an ability on the part of Señor Pezet which augurs well for a brilliant future in writings of this kind. His personal acting, moreover, of one of the leading parts was remarkably well done and demonstrated his resourcefulness. The editorial staff of the BULLETIN congratulate Sr. Alfonso Pezet on the brilliant success of his début in Washington as a playwright and actor. It is also gratifying to note that one of the popular members of the Governing Board of the Pan American Union has a son who is thus distinguishing himself in histrionic circles of the United States.

DINNER OF THE PAN AMERICAN SOCIETY.

The Pan American Notes of this issue of the BULLETIN go to press just before the holding of the annual dinner of the Pan American Society of the United States at the Waldorf-Astoria Hotel, New York City, on the evening of May 15. The date of the dinner was postponed from April 28 on account of the unexpected trip to California of the Secretary of State, Hon William J. Bryan, chairman of the Governing Board of the Pan American Union. In the June issue there will be a full report of this dinner.

PAN AMERICA IN THE MAGAZINES

"Down the West Coast to Lima," by Ernest Peixotto, in the April number of Scribner's Magazine, in its unusually fine descriptions and original illustrations, far exceeds the usual travel story. The anticipated opening of the Panama Canal lends an interest to the great west coast of South America which, owing to the difficulties of travel encountered in reaching it, has hitherto been lacking. As soon as that auspicious event has become a reality and the new lines of traffic and of travel have been established, this west coast promises to become a veritable mecca for tourists, especially for those interested in the ancient civilization of Peru and Bolivia, and incidentally for those who may hope to combine business with pleasure. Hence the timeliness of articles such as the one under consideration.

The following paragraphs serve to show the author's charming style of narrative:

As we slowly steamed down the Gulf the sun neared the horizon, and its broad golden rays spread out great fingers behind the purple islands, making them appear, as one of the young ladies naively expressed it, "like the old pictures of heaven." Long files of pelicans lazily flapped their heavy wings as they slowly made their way homeward against the evening breeze.

An hour later the faint forms of the Pearl Islands rose before us—San Jose to the southward, Pedro Gonzales to the north, and behind them the cloud-wreathed summit of Rey Island, that screened from view St. Michaels Bay, where Balboa strode into the surf to take possession of the Southern Sea in the name of the Spanish King. These islands lured us like sirens, as they had many a mariner before us, by the glint of their precious gems, to fall into the hands of some pirate, some John Sharp or his like, lurking in an inlet awaiting the galleons, gold laden, that bore the treasure of the Incas for transshipment to Spain.

Following the same track that we were taking, Pizarro, nearly 400 years ago, with his little company, had set out upon his conquest of Peru. And that tall brig upon the horizon,

"her tiering canvas in sheeted silver spread,"

might she not well be his caravel bound for Gorgona or lonely Gallo or the verdant islands of the Gulf of Guayaquil? The sun had now set; the clouds parted, and the moon, hitherto hidden, poured its pale radiance upon the calm Pacific * * *.

Upon this homelike boat, quiet and contented, with no unseemly hurry, you meander down the coast at 10 knots. The air is soft as a caress, and for at least eight months of the year the sea as placid as a mountain lake, a glassy mirror reflecting an azure sky.

For one who wishes to escape the rigors of a northern winter, for a lover of soft sunshine, of southern seas without the brisk trades of the Caribbean, I can imagine no more delightful voyage than this west coast cruise, quietly gliding southward, a cloudless sky overhead in the daytime, a marvelous starry heaven at night. Little



TIME AT THE PRYING EYE OF THE CAMERA

THE NEW YORK TIMES



Courtesy of Scribner's Magazine

PLAZA OF SAN FRANCISCO.

"The Plaza is a handsome square, well paved, neatly kept, and adorned with beautiful tropical gardens set with flowers and stately palms, and ornate lamp-posts supporting arches of lights for festivals. It is surrounded on two sides by portales, or arcades, lined with shops. The third side is occupied by the palace and the fourth by the cathedral." (Illustrating "Down the West Coast to Lima" and Ernest Peivotto's forthcoming book, "Pacific Shores from Panama," to be published by Charles Scribner's Sons.)

by with the North Star drops toward the horizon, little by little the Southern Cross ascends in the firmament.

It may be hot for the first day or two, but on the third day out you cross the Equator and face the breeze that follows the Antarctic current, Humboldt's current, that freshens and cools what would otherwise be a hot and steamy coast. Occasionally the calm surface of the sea is ruffled, now by the spikelike fin of a shark or the blow and rounded back of a gray whale; again by tortoise, shining like great topazes set in opals, or by silvery flying fish skimming from wave to wave, or schools of white-bellied mantas that frolic along by the steamer's side.

Arrived at Paita, the author's attention was first attracted to the captain of the port, resplendent in his gold-laced uniform, as he sat in the stern sheets of his smart chaloupa, manned by four stalwart oarsmen in spotless white, coming out to pay his official visit to the vessel, but he continues:

I lost all interest in him, however, as soon as I made out the queer rafts and boats that were now paddling out toward us. Here, come to life again, were the old woodcuts in Oviedo's "Historia." In the first edition of this old book, now rare and costly, published in Seville only a few years after the Conquest, there are quaint pictures showing the manners and customs of the natives as the Spaniards first found them; their thatched huts, their cabins perched in the treetops, their strange animals and queer fish, and their various primitive boats. Here in this harbor of Paita these selfsame craft were coming out to meet us—dugouts filled with fruit and manned by single Indians, balsas of cabbagewood (a light timber common to Ecuador and Colombia), like those that brought the friendly caciques to greet Pizarro, and larger rafts rigged with square sails that ferried him and his little army, horses and all, from Puño to Tumbes, only a few miles distant in the Gulf of Guayaquil.

The writer then gives graphic descriptions of Paita, Eten, Pacasmayo, Salaverry, the coast along which the vessel skirted, the little islands covered with myriads of birds and seals, and finally lands the reader in the harbor of Callao. From Callao to Lima, the charming capital of Peru, is a trip by train of only 8 miles, and the writer comments on this section of the country as follows:

I rubbed my eyes as we sped along. Was I in Peru in early March or in California in September? It was surely the end of summer, for here were fields of ripened corn, there vendors of luscious grapes. The cattle grazing in the parched fields; the Rimac roaring over its stony bed; the tawney shores of San Lorenzo wreathed with fog like the Contra Costa hills; the files of eucalypti, even the whistle of the American-built locomotive and the clang of its bell, recalled, like magic, the country that surrounds the Bay of San Francisco or hides within the depths of Sonoma Valley.

But there across the aisle sat a major in his Franco-Peruvian uniform, while in front of him a group of young subalterns in the same neat clothes conversed amiably with ladies in rather large hats, and in the coach ahead, second class, the cholos and other mixed races that we could see proved beyond a doubt that we were in Peru.

Delightful pen pictures of Lima, such as the following are given:

Lima has a physiognomy all its own. Throughout the colonial period it was the capital of the Spanish-American colonies, the residence of the viceroy and of the nobility. Hence it contains, more than any other South American city, notable examples of Hispanic architecture little suspected by the average tourist.



COURTESY OF SCRIBNER'S MAGAZINE

PATIO OF THE TORRE TAGLIAVALLE

This great patio is one through which a cool breeze when descending from the Spanish balconies, steps are arranged for mounting and dismounting from horses. The court itself is shaded by a broad projecting balcony of cedar wood left without paint or varnish, its columns, arches, and balustrades richly carved, and its supporting corbels, elaborate and intricate in detail, ornamented with heads of animals and men that, though Hispanic in design, are evidently the handiwork of highly skilled Indian workmen." (Illustrating "Down the West Coast to Lima and Further Provinces of the country," and "Pacific States from Panama" to be published by Charles Scribner's Sons.)



THE MOUNTAIN OF THE FUTURE

THE MOUNTAIN OF THE FUTURE, A LANTERN SLIDE BY THE LANTERN SLIDE CO., NEW YORK, N. Y.

The streets, too, have a distinct individuality, imparted to a great extent by the balconies, adaptations of the oriental *moucharaby*, or *mirador*, often elaborately carved, that project from the upper story of almost every house, far out over the sidewalks, sometimes occurring uninterruptedly for blocks at a time. They are most practical, allowing the air to pass freely to the rooms within, yet screening the house walls from the direct rays of the sun. The people, especially the women, live upon them, flitting behind their long rows of windows as they pass from room to room or leaning over the rail to watch the life in the street below. The shops, too, are peculiar, being without fronts—wide open during the daytime and closed by long series of folding wooden doors at night.

Much interest is also imparted to these streets by the stately palaces, mostly dating from the viceregal period, that are encountered in all the principal thoroughfares. They present a rather forbidding aspect, with their great walls pierced only by a few barred windows and by their monumental *porte-cochères*. But look through one of these vast doorways and all is gayety within. In an instant you are transported to Spain and the sunlit courts of Andalusia. Here the same patios, washed with pale pastel-tones and paved with tiles or colored marbles, bask in the sunlight, decked with palms and oleanders screened behind iron grills of intricate and artistic workmanship. Through pavilions at the rear you catch glimpses of other gardens beyond. The whole scheme, cool, airy, framing the peep of blue sky overhead, seems singularly well adapted to this land of soft sunshine.

Vivid descriptions of the old cathedral: the site of the remains of the great conquistador, Pizzaro; of the old palace, now occupied by the President of Peru; of some of the fine old churches and monasteries; and some of the public buildings, among them the celebrated palace of the Torre Tagles, add many informative details to the story. Of the last-named structure the author gives the following sketch:

The palace of the Torre Tagles without doubt takes precedence over all the secular buildings of the city. Its superb balconies, the finest in the city, would alone arrest your attention, or its doorway, the best example of the Churrigueresque style that I saw in Peru. You may or you may not like this form of architecture, with its bizarre proportions, its broken pediments, its general lack of organism, but the mere bulk of this entrance, the grandeur of its scale and absence of finicky detail will prepare you for the splendid courtyard within. This great patio is reached through a deep vestibule where, after the fashion of Spanish palaces, steps are arranged for mounting and dismounting from horses.

The court itself is shaded by a broad projecting balcony of cedar wood, left without paint or varnish, its columns, arches, and balustrades richly carved, and its supporting corbels, elaborate and intricate in detail, ornamented with heads of animals and men that, though Hispanic in design, are evidently the handiwork of highly skilled Indian workmen.

A broad staircase, whose glazed tiles imitate a stair rail upon the one hand, while its mahogany stair rail imitates these same tiles upon the other, leads to the upper balcony, where the main apartments open. These are spacious and handsome, and still contain much of their antique furniture of the viceregal period, among other things two superb wardrobes, royal objects of massive design completely incrustated with mother-of-pearl, silver, and tortoise shell, the viceroy of Mexico's wedding gift to an ancestor of the family. Handsome portraits of gentlemen in wigs and the elaborately embroidered coats and waistcoats of the eighteenth century, and of ladies in the voluminous skirts and powdered hair of the same period, complete a picture of aristocratic life under the Spanish régime.



THE OGOYA RAILWAY

SCENES ALONG THE OGOYA RAILWAY

OGoya is a beautiful bay, and the railway which runs along its coast is one of the most important in the world. (Illustrating "Down the West Coast to Lima" and Ernest Peixotto's forthcoming book, "The Story of the Ogoia Railway.")

The article closes with a particularly fine description of the wonderful scenery along the famous Oroya Railway from Lima to Oroya, the only railway in the world which reaches an altitude of 15,865 feet above the level of the sea.

"The Americanization of Europe and the Europeanization of America," by Guglielmo Ferrero, in Hearst's Magazine for February, is the third of the series of articles, the first of which appeared in the December issue under the title "America and Europe Compared."



Courtesy of Hearst's Magazine.

DR. GUGLIELMO FERRERO.

In 1906 Dr. Ferrero was born. He belongs to one of the families in Buenos Aires and to the elite in Argentina. He traveled extensively throughout the country, and then went to Rio de Janeiro, Brazil, where he spent about a month and half. Upon his return to Europe he was invited by President Roosevelt to visit the United States. He accepted the invitation and remained here for three months. He has thus been enabled to make a study of American life in north, hemisphere. The result of his investigation and study of American civilization, his thoughtful analysis of the point of progress which characterizes it, the contrast between it and that of Europe, and finally, between which civilization is on the other, are all brought out in a striking manner in the series of articles published in Hearst's Magazine under the title "America and Europe Compared."

society, is an indisputable fact. It is not necessary to have a profound knowledge of European society to perceive this. So that I do not hesitate to say that the one idea that has taken deep hold of the European masses during the last 50 years is this American idea of progress.

And I must confess that before visiting America I belonged to that group of Europeans, which has many adherents among the upper, cultivated classes everywhere, who lament this Americanization of Europe, regarding it as a kind of mental aberration, a sign of the decadence of the Old World. This opinion is pretty widespread in Europe. It may surprise many Americans; and yet it will not seem paradoxical to

Having given us his solution of the mysterious force which underlies and actuates the "demon of American progress," and followed this with his views of certain phases of American life, which would seem to indicate that its great materialism is tempered by an idealism unknown in the Europe of to-day, he now dwells upon the effects which the civilizations and ideals of the two worlds are having upon one another. Dr Ferrero's eminence as an historian and student of men gives such weight to his deductions that we are tempted to give copious extracts from his interesting articles. He writes:

That Europe is being Americanized and that the American idea of progress—the piling up of wealth and the perfecting of the tools of production—is penetrating and pervading European

those who reflect upon the history of European civilization before the French Revolution. * * *

Before the French Revolution, differences in wealth and population were imperceptible except when increased by conquests—such things as the *Revolutions* wrought by any single generation. On the other hand, men in those days strove to beautify the world and make it a better place; their most intense preoccupations were with art and religion.

Then, however—

says one of the speakers in his dialogue

which taught the world to chisel and to write, to the Middle Ages that built the loveliest cathedrals, the most charming palaces of all time; from the Egypt of the Ptolomies, whence Hellenic beauty spread its glory to the remotest inlet of the Mediterranean, to the Rome of the Popes, cinque-cento Venice, resplendent in its marbles, and eighteenth century France, immortalizing three sovereigns in three famous decorative styles which she imposed upon the world; from Augustus, patron of Horace and Virgil, and Louis XIV, patron of Racine and Molière, to the Marchioness Pompadour who strove to make Paris the center of elegance—was not the superlative ambition of all these peoples and States the immortalization of some form of beauty?

Such was Europe of the old régime, creator of the countless masterpieces of architecture, sculpture, and painting, to-day so much admired even by Americans; the old Europe, discoverer of America, creator of science, fashioner of the French Revolution.

But all that remains of this Europe American progress is now destroying with all speed. The artistic spirit is everywhere disappearing from a Continent which for centuries was the prophet of beauty to the world.

As an instance of this disappearance of the artistic spirit, the author cites the smaller Italian cities, where are often found ancient monuments, churches, and palaces which, through indifference and neglect, are falling into ruin, thus marring the last remnants of a bygone beauty.

A municipality that can not raise a few thousand lire to preserve this or that great monument in good condition will spend large sums to place electric lamps in streets where no one passes after 9 o'clock;

complains the Doctor. He adds:

The further and more evident proof of this triumph of American progress is the decadence or disappearance of all the schools of art. In past centuries, in harder and more hampered times than our own, Europe was the mother and glorious mistress of civilization, for under manifold forms she had the genius to create and bring to flower schools of literature, sculpture, painting, architecture, and music. To-day almost all of these schools have disappeared, and of those that remain all but a very few are in process of decay.

On the other hand, schools of electrical and mechanical engineering, of dyeing and weaving, of commerce and chemistry—the only ones that the masses demand—multiply and flourish. In past centuries Governments and the aristocracies of Europe protected and encouraged the fine arts in many ways, and this protection was one of the principal reasons for their progress. This is no longer true.

The wealthy classes of contemporary Europe consider it much more dignified and elegant to manufacture automobiles and aeroplanes than to support painting and sculpture. As for Governments, whenever one of them ventures to lend even a little aid to the fine arts, the cry goes up on all sides that the money of the people is being foolishly squandered.

Why is Europe so ready to-day to destroy her secular tradition of art only to emulate the swiftness of achievement and the daring initiative of the New World?

Numerous factors, according to the doctor, enter into the solution of this problem. First he mentions the discovery of America, with its incidental spur to material development, and the discoveries in all parts of the world.

Europe beheld the earth rise from the deep on every hand, and as she saw the lands multiply she felt a growing desire to possess them, to rule them, and make them yield abundantly. * * *

Then there began, in the seventeenth and eighteenth centuries, slowly at first, that striving of the mind and will which was little by little to place in the hands of our civilization all the weapons necessary to conquer the earth and make it flower. The sciences began their forward marches; the first machines were invented and put to work; the idea of liberty, of progress, of the rights of man, of the will of the people began to undermine the ancient beliefs, the ancient traditions. Yet it is probable that these would have made a long resistance, that the ancient bonds that restrained the human will from daring enterprises would have loosened indeed, but not broken for who knows how many centuries more, had it not been for that colossal event that overturned the history of Europe and America—the French Revolution * * *.

Indeed, a new history of the world begins with the French Revolution. The ideas of liberty and progress invaded both Europe and America; in all classes, among all peoples, there awakened new desires for well-being and culture. Great industries developed; railroads spread, inventions multiplied, cities became populous and grew apace; the great new phenomenon of the world's history—the intensive exploitation of America—began. The new riches, especially those so abundantly produced in America, set fire to new appetites; little by little the desire for well-being and comfort and culture spread to the multitudes and to new peoples, until all Europe and America were moved to the conquest of the earth.

And so, not only in America, but in Europe, too, there began about 50 years ago what one may truly call the Golden Age of human history, the Epoch of Plenty. * * *

"What else has man dreamed of?" exclaims one of the characters of my dialogue; "what else has man dreamed of from the morning of time than the Terrestrial Paradise, the Promised Land, the Garden of the Hesperides, the Golden Age, Araby the Blessed—one thing called by many names—the conquest of nature and Plenty. And is it not possible that the myth so passionately imagined for so many centuries is at last coming true before our eyes?"

But every medal has its reverse; and for this fabulous Plenty of which men dreamed in vain so many centuries we have had to pay, and pay dearly. * * *

Our civilization has set its aim primarily upon the conquest of nature and the intensive exploitation of all the riches of the earth. We enjoy the consequent advantages; we are not inclined to forego the railroad and the telegraph; we have no wish to run the risk of famine which haunted past civilizations; we revel in our incredible abundance and freedom; and we are altogether unwilling to return to the rigors and parsimony of earlier times.

Wherefore we must be resigned, even we Europeans, to pay the price of all these advantages and to live in an epoch in which the arts can not flourish greatly, in which religion lacks the flaming force of mystic fires, and even science will not be cultivated except in such measure as will serve immediate practical ends directed to the more intense and profitable exploitation of our natural resources. For this, too, is a phenomenon everywhere manifest in Europe to-day—disinterested research is in its decadence. Rich as the world is to-day, it is less capable of seeking the truth for the sole

pleasure in possessing knowledge that it was two centuries ago. And it was so much poorer. Even scientists to-day are eager to transmute their discoveries into wealth.

The Americanization of Europe is accordingly a fatal event. From the moment that Europe set her heart upon great riches and the conquest of nature she was obliged to renounce many of the treasures of her ancient and refined culture. This was the conclusion upon which I rested for an instant * * *.

Yes—I was disposed to agree.

In Europe culture is destined to increasing decay before the invasion of progress of the American variety. The dominion of the future belongs to quantity, to the nations controlling vast territories and capable of producing wealth at high speed.

But I had hardly acquiesced when America, America herself, gave me proof that the ancient culture represented by Europe is not destined to perish at all, and that if Europe is in process of Americanization, America, on the other hand, is being drawn by an internal force toward Europeanization.

In other words, the doctor finds that America is striving to use the immense wealth, which the intensive exploitation of her territory has given her, to promote the progress of the arts, of knowledge, and the religious spirit. In this connection it seems to him that if a charge were brought against America,

it would be that she has allowed her admiration for high culture to mount too high, so that she often overlooks the critical sense and fails to distinguish between the authentic and the specious in the world of ideal things—between the pure gold and the counterfeit.

The doctor then indulges in a philosophic analysis of snobbery in general, and shows its beneficial effects in particular in the matter of the encouragement of art and the higher ideals, and he writes:

Snobbery is after all nothing but a force that translates quantity into quality, to which man is impelled by the growth of wealth itself. Never was there so much snobbery as in our day, because wealth was never so abundant.

No doubt modern snobbery is full of gross folly. Never were there so many nouveaux riches—people with little education, ill prepared to enjoy the true refinements of life, ready to be deceived by clever frauds. How often, in how many houses, both in Europe and America, is not the Bourgeois Gentilhomme, that profound comedy of Molière, enacted? But in the midst of the nouveaux riches, the ignorant parvenus, there are also families—more numerous in America than in Europe—that have had their wealth for several generations whose mania for accumulating millions has relented and who have the leisure and sufficient intellectual preparation to want to apply their wealth to the support of the arts, science, and all the forms of a high culture.

This is the part of American society that corners works of art in Europe, founds museums, gives work to architects, painters, and sculptors; that indirectly and directly incites an increasing number of young men of the rising generation to turn away from the exclusive preoccupation with money-making and to devote themselves to those intellectual labors in which, until a little while ago, Europe was sole mistress. And because of this tendency, which in this section of American society grows stronger decade by decade, one may say that America is in process of Europeanization.

"The Busiest Canals on Earth" is the striking title of an article in the April number of *National Waterways*, by Mr. S. A. Thompson, editor of the magazine and secretary of the National Rivers and

Harbors Congress, under whose auspices it is being published at Washington.

No more striking illustration of the effect on the commerce and wealth of a nation by the improvement of its waterways could have been selected than is shown by the history of the canal which opened up traffic between the productive Lake Superior region and the markets of the world. The startling statements relative to the development of this commerce, a development attributable directly and indisputably to the opening of a channel of cheap transportation, are almost incredible; and yet the cold facts and figures brought out in Mr. Thompson's article can not be controverted.

This subject, the improvement of the natural highways of transportation, the waterways of a country, is one of absorbing interest, not only to the United States but to the whole civilized world. Particularly valuable, however, are articles of this nature to the countries of South America, a continent which has been blessed with the greatest river systems of the world, a continent whose vast mineral, agricultural, and forestal resources await but the development of these natural systems of transportation to astound the world with their magnitude. Considerations such as these lead us to quote extensively from Mr. Thompson's able presentation of this marvelous example of what a single waterway has accomplished in the development of this country. In introducing his theme he writes:

Back in 1849, or thereabouts, when the Senate of the United States was debating a bill to make a grant of public lands to aid the State of Michigan in building a canal at the outlet of Lake Superior, Henry Clay rose in his place and said:

"It is a scheme to squander the public resources upon a chimera beyond the remotest bounds of settlement, if not in the moon."

How fate mocks those who, lacking the guidance of inspiration, yet presume to prophesy, was never better shown than in this case. For the grant of lands was made, the canal was built, being completed in 1855, population swept westward in a mighty flood until "The Great Lone Land" was filled with thriving Commonwealths—and it is true to-day, and has been true for many years, that a greater volume of traffic is concentrated at the eastern end of Lake Superior than at any other spot in all the world.

Mr. Thompson then sketches the building of the first locks in 1855, supplemented by the larger one 515 feet long and 80 feet wide—completed in 1881; the blowing up with dynamite of the first locks and their replacement in 1896 with a new lock, 800 feet long and 100 feet wide; the building of the new canal on the Canadian side of the river; and finally the construction of a third tremendous lock 1,350 feet long, 80 wide, and 24½ deep at extreme low water, which is to be completed in 1914. Provision is now being made for the construction of a fourth lock of the same size as the last. All this because of the urgent demand for increased facilities to handle the enormous traffic.

Fig. 1. Aerial view of the experimental area.





Photograph by Young, Lord & Rhoades. Courtesy of National Waterways.

THE NEW AMERICAN LOCK AT THE SAULT DE STE. MARIE.

Work is already well advanced on the construction of an entirely new canal on the American side, which it will be opened to traffic in 1911 and which will have a lock with really "enormous dimensions." "Larger than the Erie, so far as width, and 274 feet deep at extreme low water, which will mean about 26 feet at the average stage." "Herald," Aug. 22, 1909. Erie Report Canal on Earth, by S. A. Thompson, in National Waterways, for April.

In dealing with the great expense of all these improvements and the question whether the results have justified it, Mr. Thompson writes:

It goes without saying that these improvements have involved a large expense. The two canal and locks cut the State of Michigan about \$1,000,000; the present \$10,000,000 was authorized by the Federal Government. The total appropriation made by the United States for improvements at the falls of the St. Marys River from 1850 to July 12, 1912, amounts to \$13,415,749. In addition there has been expended at this operation, and since the start upon June 30, 1912, \$7,117,644.96, making a grand total of \$20,533,393.96.

This includes only the expenditure immediately at the falls. Work at St. Marys River at points below the falls has been done at a cost of \$8,409,115; work at various points on the "Twenty-Foot Channel" has cost \$3,365,000; and \$12,000,000 has been expended on the channels in the Detroit River. While the work in Detroit River is not done in the traffic of Great Lakes as well as to that of Lake Superior at least, to be done if the big boats that could get through the locks at St. Marys Falls were to run to and from the ports of Lake Erie.

Whether we consider the \$40,000,000 spent on the channels of the Lakes, the \$25,000,000 spent on the channels of the St. Marys River, or the \$16,000,000 used directly at the falls, the amount is large enough to warrant the question whether the expenditure has been justified by the results.

Although authenticated by statistics as accurate as any in existence, the history of the growth of traffic at "The Soo" reads more like fiction than like sober fact. It is said that in 1850 one old gray horse, hauling a car on a tramway, handled all the traffic which passed over the portage around the Sault de Ste. Marie. During the first year the little locks were open only 14,503 tons of freight passed through. It was not until 21 years later that 1,000,000 tons was reached; in 1892 the tonnage was more than 11,000,000; in 1899, more than 25,000,000; in 1906, nearly 52,000,000; and in 1912 the gates of the giant locks swung open for the passage of 22,778 vessels, carrying 72,472,676 tons of freight. * * *

One can gain a clearer idea of the tremendous effect which the opening of the canal has had upon the commerce and industry of the United States by noting the commodities which constitute the bulk of the traffic.

One item of the commerce in 1855 consisted of 1,447 net tons of iron ore shipped from the newly opened mines on the Marquette range in upper Michigan. Except for the first year the tonnage of iron ore has always been greater than that of any other commodity, and during most of the time it has been greater than that of all others combined. Last year the shipments of iron ore amounted to 46,303,423 net tons, which exceeded the combined weight of all other articles by more than 20,000,000 tons. The total shipments of iron ore through the "Soo" canals have reached the colossal total of 490,539,866 tons. It is due first to the great deposits of high-grade ore in the Lake Superior region, and next to the cheap transportation of that ore made possible by the building of the canal, that the United States ranks first among the nations of the earth in the production of iron and steel.

As might be expected, since the Northwest is a country of cold winters, the shipment of coal began at the first opportunity. Only 1,441 tons went west in 1855, while the shipments for 1912 were 14,931,594 tons, and the total shipments from the beginning have been 157,686,117 tons. Think of all the locomotives run, the factory wheels turned, the dinners cooked, and the homes made comfortable by the burning of this vast quantity of coal.

Naturally, also, flour was one of the first commodities to be moved through the canal, 10,289 barrels being shipped during the first year. For the first 17 years all the flour went westward, then the current turned in the other direction, and grew swiftly



Photo graph by Young-Loren A. Rhoades. Center of National Waterways

SHIPPING AT THE SUEZ CANAL

It is estimated that not less than 800,000,000 worth of freight passed through the canal during 1912, and that the canal is the only one of its kind, awaiting their turns at the right of way. Illustrating "The Busiest Canals on Earth," by S. A. Thompson, in National Waterways for April.

In volume the total for 1911 there is not tallied, and it is only the 176,000 barrels.

Except for a few barrels in 1890 and 1891, when were probably not tallied, wheat was shipped until 1890, when 40,000 bushels were exported. By the next year this had increased to 1,376,705 bushels, and following the settlement of Minnesota, the Dakotas, and still later of the Canadian Northwest, the flood of golden grain grew ever greater until it amounted in 1912 to 174,086,456 bushels, and the total for the entire time is 3,029,888,814 bushels. To make the flour already mentioned, besides which there have been 651,692,255 bushels of other grain, making a grand total of 3,234,734,598 bushels of grain which the "Soo" has helped to pass on to feed a hungry world.

Counting all other items, Mr. Thompson concludes that the total traffic passing through the canal since its opening amounts to the stupendous sum of \$8,622,148,001. He concludes:

This means that if the whole \$40,000,000 which has been expended on locks, canals, and channels from Lake Superior through to Lake Erie is charged against the business of Lake Superior alone, it amounts to only 5 cents per ton of weight and to less than one-half cent per dollar of value of the traffic which has already been carried. Who can tell what further growth of traffic the future is to bring?

"The Progress of Peru in 1912," by F. A. Pezet, minister of Peru to the United States, is an interesting and informative article appearing in the February number of *Export-Import*, the official international organ of the National Association of Manufacturers (30 Church Street, New York).

The minister deals in a most comprehensive manner with the various phases of industrial and commercial progress of Peru during the past year, including clear and concise sketches of the great improvements in transportation, wireless telegraphy, irrigation works, mining, agriculture, foreign trade, and the active forces which are working for the common good of the entire country.

As to improvement in transportation facilities he writes:

Transportation in a country such as Peru—divided by nature into three distinct zones, each with special climatic conditions, producing mineral and agricultural and animal sources of wealth varied and distinct, and containing populations specially adapted to each of them—the questions of transportation and of means of communication become of the greatest importance and call for immediate attention on the part of the Government. No wonder, then, that the last two administrations should have devoted so much attention to what I may call a "transportation policy," and thereby prepared the way for the great development of the country by means of extended railway construction, coastwise and river navigation, and the building of roads and highways. Peru boasts of having within its territory some of the most magnificent railroads from a scenic point of view and also some of the most daring from an engineering point of view. The two great trunk lines, "The Central Railway of Peru" and "The Southern Railway of Peru," are considered among the greatest engineering feats which have been accomplished in any country and at any time.

During the past year both of these railroad systems have been extended, while important surveys have been done in furtherance of the project to eventually make them join and form one great system.



THE MUNICIPAL BUILDING AT NIGHT, LIMA, PERU.

A fine system of lighting obtains in the beautiful capital of Peru, and the above picture gives an idea of the brilliant illumination of some of its public buildings upon festive occasions.



SCHOOL OF ARTS AND TRADES OF LIMA, PERU.

Handsome educational edifices, such as the one shown in this picture, are further marks of the wonderful progress of Peru, of whose industrial advance in 1912 Minister Pezet writes in the February number of *Export American Industries*.

The "Central" is being carried out by American engineering at Huaracayo. The "Southern" is being extended toward the north from its present terminal at Cuzco. From each of these systems branches of more or less importance are being built, or are under survey to be constructed in the near future. Perhaps the most important of these is the line to the Madre de Dios River, which has been contracted for by the Peruvian Corporation (Ltd.), and which will open up one of the most wonderful agricultural regions within the Amazon watershed.

In the north of Peru the following lines have been surveyed and contracts for their construction have been given: Piura to Catacaos (the latter is the town where the Panama-hat industry is carried on), Catacaos to Sechura (the latter is the center of a large salt industry); the Pimentel-Pomalea-Lambayeque Railroad, with concessions to build a pier at Pimentel (this line will open up a very rich rice and cane region, which needs a direct outlet to the ocean); Pacasmayo to Cajamarca (this still under survey—a very important line, which will open up a rich mineral region); Trujillo-Salpo-Quirovilca, under agreement with the Peruvian Corporation for survey (this line will be of great benefit to a very rich gold and copper district where mining is being carried on with success * * *).

The Chimbote-Recuay is one of the railroads which is to do for the development of Peru more than perhaps any of the other lines under construction. To understand what this line means it should be known that Chimbote, the port from which it starts, is one of the finest natural harbors in the whole world, located at a point of the Peruvian coast where flows the Santa River, the one river which carries the greatest volume of water and which is known to carry gold-bearing gravel. In other words, the valley of the Santa is the best suited of the coast valleys for irrigation works on a large scale, while 20 to 40 miles inland are to be found some of the finest anthracite coal mines in the country and up the valley the mineral wealth and the agricultural wealth vie with each other as to which is the greater. * * *

By water Peru has not neglected the transportation question, and the fine fleet of steamers of the Peruvian Steamship Co., pioneers as oil burners and equipped with turbine engines, shows to what an extent our country is progressive and is awake to its possibilities as a maritime and commercial nation. Our steamers ply along the Pacific between Valparaiso, in Chile, and Panama. They are fitted with wireless and have every modern improvement, so as to insure the comfort and safety of the passengers.

As to the mining industry in Peru, Minister Pezet writes:

The new search for copper, silver, molybdenum, lead, tin, iron, vanadium, etc., during 1912 proves to what an extent the mining industries are flourishing in Peru. The number of mining claims denounced in the country reaches to something like 23,000. Hydraulic gold mining is attracting great attention just now, and some good results are expected from the works in operation. The ferro-vanadium from the Ragra mine in Peru is being worked by the American Vanadium Co., of Pittsburgh. This is at present the greatest discovered deposit of vanadium ores in the world, and through the very up-to-date methods being used at the vanadium works in Bridgeville, belonging to the American Vanadium Co., the use of vanadium steel in the engineering industries has very largely increased, much to the satisfaction of manufacturers of articles in the composition of which strength and elasticity are essentials to their lasting qualities.

Tungsten, bismuth, mercury, molybdene, and antimony are likewise being mined in Peru; chlorides, salts, borates, nitrates, limes, and natural cements, marbles, granites, and several kinds of volcanic stones are everywhere to be found throughout the length and breadth of Peru. Recently a report was current that an emerald mine had been located in the vicinity of Cuzco, while pearls have been found along the coast of Sechura.



INDUSTRIAL CAR AT CALLOO, THE FRENCH PORT OF PERU



SCENE ON THE OROYA RAILROAD IN PERU

It is, indeed, the railroads to which Marston F. Coates, in his article, "The Progress of Peru in 1912," in the February number of *Export American Industries*, when he writes, "Peru boasts of having within its territory some of the most magnificent railroads from a scenic point of view and also among the most dense traffic from a business point of view."

The rapidly growing commerce is thus dealt with:

The commerce of Peru is increasing every year, and in fact, with respect to the United States. In round numbers we export to you something like \$10,000,000 worth of prime matter, and take from you something like \$4,000,000 worth of manufactured goods. The opening of the canal is certain to make us larger buyers here, because it is going to be the means through which our development is to increase—which signifies that we shall need more of the articles which we obtain from you and others which the changed condition will undoubtedly call for. Besides, our ships, I hope, will come to your waters and load at your ports cargoes of American goods and carry them through the canal to our Pacific coast, and other Peruvian ships will carry your goods to our Amazon ports and bring from there the valuable products of those regions. The development of our mines, the extension of our railroads, the irrigation of our coast, will be so many factors for closer and more extended trade relations between you and us.

In the year 1912 our commerce has probably reached a figure close onto \$60,000,000, and there is every indication that this will increase year by year.

In conclusion, the minister writes thus earnestly:

Peru is to-day on the threshold of a great development; the whole life of the nation is being remolded, as it were, and when we are thus bravely forging ahead and showing in many ways our determination to succeed, it is saddening to see that those who should be our friends should allow themselves to be influenced by the appalling ignorance and the hysteric mischievousness of the irresponsible "scare-head" writers.

I sincerely trust that the year 1913 will see growing a more friendly sentiment toward the South American and Central American peoples, and that the greater intercourse between us may be beneficial to the ultimate understanding between the nations of all the Americas.

"The Sixty 'Rios' of the Amazon," by J. F. Ellison, in the April number of *National Waterways* (Washington), is a contribution by a veteran American steamboat captain. He is now resident general manager of the greatest inland fluvial transportation system in the world, the Amazon Navigation Co., and his statements relative to the enormous river transportation of Brazil may be relied upon. To those unfamiliar with the Amazon River and its huge tributaries the facts stated by Capt. Ellison will doubtless be astounding.

After dealing with the temperate climate of the Amazon Basin the captain writes:

Time, space, inability to spell some of the names, and the very great doubt that if they were spelled correctly they could be pronounced properly, is cause for mentioning only a few of the more important rivers forming the Valley of the Amazon.

Everybody knows of the Amazon; many, perhaps, know of the Madeira, for on that river, 1,750 miles from the coast, one of the wonder railroads of the world has been built by Americans. A few people outside of Brazil know something of the Solimões, the Purus, the Jurua, and the Negro; very few Brazilians themselves, and few, even, of the rivermen, know all of the 50 or 60 other "rios" tributary to one or the other of the main streams, and all, in turn, tributary to the Amazon.

In considering the statements which follow, the fact should not be lost sight of that it is an American boatman, accustomed to American river boats and ways, that is making them.



THE HARBOR OF MANAOS, BRAZIL.

Picture of Manaus, capital of the Brazilian State of Amazonas, across the Rio Negro, a few miles from the equator, with the Amazon and tributary floodwaters up that latter river from the Atlantic Ocean. The city is not only a sea, river port, but a great air port, vessels that land directly for the United States of Europe, and all from the same foreign waters without intermediate stop. To facilitate this great commerce, a system of most improved and modern docks has been constructed. As the difference between high and low water is about 45 feet, that part of the docks to which steamers tie is so constructed that it floats, rising and falling in accordance with the amount of water in the river.



THE DOCKS AT MANAOS, BRAZIL.

The method of maintaining constant communication between the steamers at the docks and the warehouses on the shore is very ingenious. The docks themselves float, but are connected to the shore by a movable platform. Between warehouse and dock are numerous cables on which huge carriers travel back and forth to load or to unload. Thus there is no interruption to the commercial activity, no matter what the condition of the water in the Rio Negro may be.

The same issue of the magazine, *The Atlantic*, October, 1905, has reported that "on Saturday, August 11 last, in the harbor of an English company, which boasts that English boats are to be seen with satisfactory frequency, been the only kind of boat used; being willing always to "give credit where credit is due," testimony is cheerfully given that our English cousins build magnificent ships for deep-sea service, splendid lake and bay steamers; but if, in all their history as a maritime people, they ever built a good, serviceable light-draft river steamboat, personal observation, covering a fairly wide range of territory and a vastly wider field of reading, has never beheld such.

For the Amazon and lower reaches of the important tributaries the English boats do fairly well, but in the extreme *altos rios*, where in dry seasons the channels get to 6 feet or less, they are not "in it," and the American stern-wheeler, the premier light-draft boat of the world, is now, for the first time in the history of north Brazil navigation, to be used and will, undoubtedly, penetrate farther into the upper reaches of the rivers than any other steam craft has ever gone; that they will bring new rubber districts into the market is a foregone conclusion.

The Subvention Edital, under which 16 different lines of the *Companhia Navagação do Amazonas* operate, calls for an annual run of 363,550 miles, and this covers line runs only, and not voyages into the *altos rios*. Right here some of our old Mississippi or Ohio River friends will smile and shake their heads skeptically. The answer is, if you do not believe, come down for a little trip of six or eight months, go over the lines, and then be prepared to apologize.

The company named owns and operates 62 steamers of the combined freight and passenger class, the total tonnage of the fleet by Government measure being 39,000 tons, and, in addition, there are 45 other steamers registered at Para and Manaus under private ownership; these, in addition to a vast number of tugs, lighters, barges, and motor boats make up the fleet of river craft and steamers.

As to the character of the traffic, the captain writes:

Upstream, the tonnage consists largely of merchandise and foodstuffs. Downstream, rubber, Brazil nuts, and cocoa form the bulk of the traffic, with rubber leading in quantity and value. It is conservatively estimated that for every ton of rubber that comes down the river 25 tons of merchandise must go back up to supply the people who are in the forests gathering *borrachas*. So long as the Para rubber remains near its present price of \$1.25 per pound, there is no question of supplies coming in, and the statement is made with some regret that 95 per cent of all merchandise is imported. These imports come from Germany, England, the United States, Portugal, Spain, and France. As these nations are named in the order of their position in the foreign trade of Brazil, it will be seen that we rank third, and if proper effort be put forth and ships and banking facilities be provided, the United States should soon rank first of all countries in the volume of goods exported to this part of Brazil.

"Why Go Abroad?" is the title of a series of articles by Agnes C. Lam, which is running in *Sunset*, the Pacific monthly, published in San Francisco, California. In the February issue "Wandering among the cave men," is the subtitle of the story which deals with the finding of the mummied body of a small man in a cave in the Gila Canyon, New Mexico. This archaeological find is the basis for one of those delightful, bright, humorous, whimsical articles which, while they often cause a smile, contain so much food for thought and impart so much interesting information concerning the great Southwest and its antiquities.

In connection with the finding of the mummy, the author writes:

There is a second Grand Canyon not a stone's throw from everyday tourist travel, wilder in game life and rock formation, if not so large, with prehistoric caves on its precipice walls where sleeps a race of little mummied men behind doors and windows barely large enough to admit a half-grown white child. Who were they? No one knows. When did they live? So long ago, they were cave men, stone-age men; so long ago that neither history nor tradition has the faintest echo of their existence. Where did they live? No; it was not Europe, Asia, Africa, or Australia. If it were, we would know all about them. There would be a Carnegie Foundation Expedition to dig them up and exhibit them in a glass case, and reconstruct their history. As it happens, this second Grand Canyon is only in plain, near-by, home-staying America; so when boys of the Forest Service pulled Little Zeke out of his gypsum and pumice-stone dust in the cave and measured him up and found him only 23 inches long, though the hair sticking to the skull was gray and the teeth were those of an adult—as it happened only in matter-of-fact, commonplace America, poor little Zeke couldn't get shelter. They trounced his little dry bones around Silver City, New Mexico, for a few months. Then they boxed him up and shipped him away to be stowed out of sight in the cellars of the Smithsonian, Washington. As Zeke has been asleep since the ice age, about 8,000 years B. C., it doesn't make very much difference to him; but one wonders what in the world New Mexico was doing, allowing one of the most wonderful specimens ever found of a prehistoric dwarf race to be shipped out of the country. * * *

Anyway, there lies little Zeke—a long time asleep, wrapped in cerements of fine woven cloth with fluffy ruffles and folderols of woven blue-jay and bluebird and humming-bird feathers round his neck. You will please to remember that in the trilling long ago of 8,000 or 10,000 years our ancestors wore chiefly their birthday suits. Yet Zeke's people understood weaving. Also Zeke wears on his feet sandals of yucca fiber and matting. I don't know what our ancestors wore—according to evolutionists it may have been hair and monkey pads. So if you understood as much about Zeke's history as you do about the Pyramids, you'd settle some of the biggest disputes in theology and ethnology and anthropology and a lot of other "ologies" which have something more or less to do with the salvation and damnation of the soul.

How is it known that Zeke is a type of a race and not a freak specimen of a dwarf? Because other like specimens have been found in the same area in the last 10 years, and because the windows and doors of the cave dwellings of the Gila would not admit anything but a dwarf race. They may not all have been 24 and 36 and 40 inches, but no specimens the size of the mummies in other prehistoric dwellings have been found in the Gila. For instance, down at Casa Grande they found skeletons bound in the gypsum dust of black chambers, but these skeletons were 6-footers, and the roofs of the Casa Grande chambers were for tall men. Up in the Frijoles cave dwellings they have dug out of the tufa dust of 10 centuries bodies swathed in woven cloth, but these bodies are of a medium race, 5 to 6 feet. You have only to look at Zeke to know that he is not, as we understand the word, an Indian. Was he an ancestor of the Aztecs or the Toltecs?

After dwelling on the difference between the cliff dwellers and these Lilliputian cave people, speculating as to the reasons for their selection of such homes and as to how they came to be wiped out of existence, the author continues:

What did they eat, and how did they live, these ancient people, who wore woven cloth at an era when Aryan races wore skins? Like all desert races they were not great meat eaters, and the probabilities are that fish was tabooed. You find remains of game in the caves, but these are chiefly feather decorations, prayer plumes to waft petitions

in the grotto, the nearest to the surface. On the other hand, there are many caves and grottoes in the caves, of gourds and squash seeds; and every cave has a metate or grinding stone. In many of the caves there are also, in the shelter of the rock, and of water jars, urns, ollas, there are remnants and whole pieces galore. It is thought that these people used not only yucca fiber for weaving, but some species of hemp and cotton, for there are tatters and strips of what must have been cotton or linen. You see it in the accumulation of volcanic ash. The dry climate and this volcanic ash easily account for the long duration of mere cloth.

Near many of the ruins is a huge empty basin or pit, which must have been used as a reservoir in which waters were impounded during siege of war. Like conies of the rocks or beehives of modern skyscrapers, these denizens lived. The most of the mummies have been found in sealed-up chambers at the backs of the main houses, but these could hardly have been general burying places, for comparatively few mummies have yet been found, whereas great ossuaries have been located on the high isolated plateau. Who, then, were these mummies placed in sealed vaults to the rear of the dwellings? Perhaps a favorite father, brother, or sister; perhaps a governor of the tribe who perished during siege and could not be taken out to the common burial ground.

The author's fine word painting of the scenic wonders of this section of the Southwest, and her descriptions of the attractions it offers to the lover of sport, as well as to the archaeologist and ethnologist, are calculated to arouse a yearning in the soul of the reader to behold these wonders with his own eyes, and if the great Southwest does not become a mecca for tourists it will not be the fault of Agnes C. Laut.

"Summer Resorts of Lima," in the February issue of *Peru To-Day* (Lima, Peru), is a short illustrated article giving a list of the delightful little resorts along the celebrated Oroya Railway line. Among these are mentioned Huacho, Ancon, La Punta, Magdalena, Miraflores, Barranco, Chorillos, and Chosica, as offering their attractions every day of the season to the fortunate Limanians, which season, by the way, extends from January to January. The author writes:

The rapid growth and ever-increasing popularity of these suburban towns with their rows of garden villas set along the cliffs or quiet streets, their picturesque walks and promenades lined with palms, ficus, and jacarandas, and the convenient bathing and dining establishments, is bound to prove in the future a valuable asset to the many other attractions of the Peruvian capital and become a strong drawing card for tourists and pleasure seekers.

"An Important Presidential Message," in the same number of this magazine, is a translation of the message of President Billinghurst, which deals in a comprehensive, clear, concise, and frank manner with the financial condition of the Peruvian Government.

"William Wheelwright" is the title of a biographical sketch which appears in the March issue of the *London Times South American Supplement*. The sketch is given under the broad title, "Englishmen in South America," and the *Times* calmly appropriates Wheelwright for Great Britain, presumably because "in later life he avowed



WILLIAM WHEELWRIGHT.

North American captain of industry in Latin America, an appreciative biographical sketch of whom appears in the March 15th of the London Times' South American Supplement.

himself an Englishman by adoption." He really went to London when in his 75th year, because of ill health and for the purpose of securing expert medical treatment. He died there on the 28th of September, 1873, after a residence of only a few months, and his remains were transported to his native land, to be interred in Oak Hill Cemetery, in the town of his birth, Newburyport, Massachusetts. Having been born, reared, and educated in the United States, and his life's activities given to the countries of South America after he reached the age of 24, would seem to indicate that he was an American. Perhaps dying in London made him an Englishman. Be that as it may, the Times does justice to the remarkable energy and constructive genius of the man, vide its opening paragraph:

The founder of the Pacific Steam Navigation Co. did more, perhaps, than any other man to bring Great Britain into contact with the Republics of the west coast. He spent much of his active life in the River Plate. He was born in the United States; his mother, however, was German. His history by degrees, his biography written by an Argentine, Peru recognizes him as a benefactor; his statue stands in a public square at Valparaiso. But his best monument is the line of steamboats of which he was the originator. Never was a more signal example of the cosmopolitan captain of industry throwing his Anglo-Saxon energy into various channels in many lands. But the two countries which owe him most are England and Chile, and his work forms one of the many bonds which link the United Kingdom with the progressive Republic of the South Pacific. His pregnant activities may be summed up in a few words: "He gave steam navigation to the Pacific, he gave railways to Chile, and he introduced the Chilean coal industry."

"Japanese Emigration to South America," in the Times South American Supplement for March 25, is an article by one of its Tokyo correspondents which shows something of Japan's activities in opening new fields for colonization, particularly in South America. The correspondent writes:

There is a great deal of interest being taken in Japan at present in emigration to South America. An emigration steamer is shortly to leave for Brazil, and the Morioka Emigration Co., in conjunction with the Toyo Kisen Kaisha Steamship Co., is at present recruiting emigrants for Peru. The emigrant has to make a payment of £14. Out of this the emigration company takes £2 commission, consular fees are paid, and the emigrant is given 30s. to land with; the balance is kept by the steamship company as fare. The port of arrival is Callao, and much of the work to be done is in the immediate neighborhood of Lima. Sugar, coffee, cocoa, and cotton are mentioned as the chief kinds of plantations, and it is also pointed out that there is a very large opening for trade in fish. Fish abounds off the coast, and a great deal of fish is consumed (presumably imported salt fish), but up to the present the local fish industry seems to have been neglected. * * *

Japan has for some years turned her attention to Brazil as a field for Japanese labor, and recent political events will have a marked influence on this. When Prince Katsura was premier some three years ago a company was formed under the auspices of the minister for agriculture and commerce, Viscount Oura, to acquire some good agricultural land in the State of Sao Paulo, Brazil, and to settle a number of Japanese upon it. Since the recent fall of the Saionji cabinet Prince Katsura has again been premier, Viscount Oura having the home office, and on January 13 a large meeting was



STATUE OF WILLIAM WHEELWRIGHT

The statue was erected in Valparaiso, Chile, in 1871, funds for the purpose having been obtained by popular subscription in Chile and the Argentine Republic. One of the principal advocates of perpetuating the memory of Mr. Wheelwright through the erection of this statue was the late Dr. J. B. Alberdi, the distinguished Argentine statesman, alluded to in the *London Times* South American Supplement in its biographical sketch of Wheelwright.

lead at the present time all projects of emigration to Brazil. A large tract of land has been leased from the State of São Paulo and other States to send out some 2,000 Japanese families to settle there. The president of the Nippon Yusen Kaisha Steamship Co., Baron Kondo, is on the committee, as are several prominent business men, so that with this backing the scheme should be a great success. The Brazilian Government is very much in favor of it, and has offered to do all it can to help in every way.

Emigration of Japanese to Brazil has been going on for some time, but this State-aided scheme of sending out farmers and their families to land leased by Japanese owners will give a better status to the Japanese in Brazil, and should give an impulse to the whole emigration movement. Wherever the writer went in Brazil there was always a cry of "Make Brazil great!" and "Better than we need to open up and make productive much of this magnificent land."

"Brazilian Shipping" is the title given to an interesting article in the *Times' South American Supplement* of March 25. Some idea of the remarkable growth of the import and export trade of Brazil may be had from the following:

The large and growing export and import trade of Brazil, which has increased from £58,300,000 in 1900 to £119,780,000 during 1911, finds employment for a very extensive trading fleet, in which vessels of nearly every nationality are found. The vessels entering and leaving Brazilian ports may be subdivided into two sections—those to and from oversea countries and those to and from Brazilian and other South American ports—essentially a coasting traffic. The latter is the larger in number, but is only of about one-third the tonnage of the former. Practically the whole of the latter is in Brazilian hands.

Over 4,500 foreign steam trading vessels enter Brazilian ports annually, together with a small number of sailing vessels, the average during recent years being only 350. The largest number both of steamers and sailing vessels are British (over 50 per cent of the former), and it is noteworthy that, although the trade between Brazil and the United States is a very considerable one, only a few American steamers and sailing ships—not more than 10 during recent years—enter Brazilian ports. The United States, Japan, and Greece form a group with an aggregate of about 12 to 15 steamers and sailing vessels engaged in the Brazilian trade annually.

Germany has the second largest number of vessels engaged in the trade, about 1,000 steamers and 35 to 40 sailing vessels. France and Italy follow with about 400 and 336 steamers, respectively, Italy having also about 30 sailing vessels. Austria and Holland send, respectively, 155 and 165 steamers to Brazil. Other nations are represented by a very small number of trading vessels. Belgium has about 12, Denmark about 9 or 10 steamers and over 30 sailing vessels, Spain some 85 steamers, and Norway over 100 sailing vessels and 28 steamers. The Swedish trading fleet entering Brazilian ports numbers 25 steamers and 7 sailing vessels. * * *

The largest oversea tonnage of both steamers and sailing vessels is British, the recent average being nearly 6,800,000 tons. It is noteworthy that, large as this tonnage is, it is less than that of the Brazilian coasting trade. The German tonnage is the second largest, approximating to 2,900,000 tons annually. The French and Italian are much smaller, being only some 1,350,000 and 1,100,000 tons, respectively. The Dutch tonnage is about 500,000 annually, the Austrian only slightly exceeds 400,000, and the Spanish is below 250,000 tons.

"Activity in Colombian Placers" is the title of the leading editorial in *The Engineering and Mining Journal* (505 Pearl Street, New York) of March 8, 1913. After noting the fact that Colombian

placers are coming in for increased attention and on a more sensible basis than some of the earlier attempts at placer mining in that country, the editor continues:

For a number of years there have been numerous abortive attempts to work the placers of Colombia. Many of these efforts have failed because of the shortsightedness of their promoters; enterprises were started with inadequate capital or with insufficient technical direction or without consideration of climatic conditions, either as regards floods or as affecting the health and efficiency of the operators. Failure for most of these was foredoomed. Attempts were made by another class of operators who attempted to follow the natives and handle ground that had already been worked by the latter, perhaps several times, either in modern or earlier days. Naturally the foreigner had no advantage in such ground and the efforts to find rich pockets or unworked playas have met with indifferent success; when a strike was made its price was usually lost in subsequent fruitless work.

After going into some detail as to the character of gravels, location, etc., of the best properties and briefly outlining the progress and prospects of the companies actively engaged in the industry, the editor concludes with the following general survey of the situation:

From the point of view of stable political conditions Colombia is one of the best of the South American Republics, and with its liberal laws should soon attract capital for the development of its natural resources—both mineral and agricultural. Its two great watersheds, the Magdalena in the center and the Atrato on the west, are just now receiving much attention, the Magdalena and its tributaries for placer gold and the Atrato for both gold and platinum. A little attention has been given to the mining of other metals, but on account of difficulties of transport away from the natural water highways lode mining in general must await its pioneer sister, placer mining. When the latter shall have drawn experienced operators into the country and the gravels are beginning to be worked out, attention will doubtless be directed to the copper, silver, and gold lodes of which reports are occasionally received. For the present, however, attention will be directed mainly to the placers, and if these efforts are successful it is likely that the next decade will be principally occupied with this form of mining, leaving the lode deposits for later attention.

The Amazon Valley Indians is the title of an interesting open letter written to The Springfield Sunday Republican by Mr. George R. Witte, retired missionary of the Presbyterian Board of Missions. The communication, which appears in the February 23 issue of The Republican, was called forth by the press accounts of the expedition to the Amazon Valley fitted out by the University Museum of Philadelphia, a branch of the University of Pennsylvania, and the writer takes occasion to express his doubts as to the reliability of the account of the experiences and observations of Mr. Algot Lange relative to a tribe of Indians called the Mangaromas, as set out in Mr. Lange's book, "In the Amazon Jungle." Mr. Lange says that he spent some five months at Floresta, the headquarters of a very large rubber estate on the Javary River, and that he accompanied a small expedition which left the headquarters to penetrate into hitherto unknown depths of the eastern forests of Brazil for the purpose of

hunting and locating new rubber trees. After two of his companions had died, one from beriberi and the other from the bite of a poisonous snake, Lange was rescued from death by starvation and illness by some Indians whom he calls the Mangatomas. He remained with this tribe for about two months, and, among his other statements relative to their modes of living, customs, etc., is the one that these Indians made a practice of eating certain portions of their enemies killed in battle. It is this assertion of the existence of cannibalism that Mr. Witte takes exception to and concerning which he writes:

With all respect to Mr. Lange's assertions, I am, however, that I was earnestly desirous that this assertion of cannibalism among Brazilian Indians might for once be authoritatively settled. During my six years' stay in the Amazon Basin, living four of the six years among Indians and virtually out of all touch with civilization, I have come to doubt that there are any such tribes now in existence. I know that charges of cannibalism are occasionally made by travelers and traders, those of the former class being generally based on hearsay and those of the latter being often made, I fear, to cover up their own villainous misdeeds. * * *

My first journey in Brazil (1898-99) in the interest of the Indians was taken up with a voyage on the Tocantins to the center of the State of Goyaz, which is the only State in Brazil not bordering either on the coast or any foreign frontier, and which is therefore appropriately termed the heart of Brazil. Thence I returned overland through the States of Piauhv and Maranhão, visiting various Indian tribes, some partly civilized and others wild. A part of this journey has been interestingly described by William Azel Cook in a volume published by the American Tract Society under the title, *Brazil, Heretofore, and Hereafter*, by William A. Bland. * * *

My subsequent journeys, twice by way of the Rio Negro, once by the Essequibo, and once by the Demarara River across British Guiana, were confined to the northern section of the Amazon River system. * * *

The writer gives the details of the route he traveled, which, however, did not embrace the territory dealt with in Lange's book, and continues as follows:

Coming back to the question of cannibalism, I would like to set over against Mr. Lange's assertions the statements of some noted travelers before mentioning my own experiences. Spix and Martius explored the Tocantins for a distance of 1,200 miles in the forties of the last century and left the records of their explorations, made under the auspices of the Austrian Government, in three magnificent volumes. Prince Adalbert of Prussia, with Count Bismarck (a cousin of the Iron Chancellor), explored the Xingu in the fifties. Messrs. Ehrenreich and von den Steinen spent two years in the upper reaches of the Xingu and in Matto Grosso about 15 years ago. Henry Coudreau went up the Tapajoz at least as far as the first series of cataracts, the description of his journey being published by the Government of Para. Kellar and his engineering companions of the Mamore-Beni Railway project have superbly painted the Madeira River territory both by pen and pencil. Herndon and Smith, of the United States Navy, explored the far west tributaries of the Marañon, and Robert Wallace, still living, spent three whole years on the Rio Negro before the days of steam navigation. Not one of these gentlemen makes mention of ever having encountered cannibal Indians. * * *

Basing my opinion on facts like these, I extremely regret that the Pennsylvania expedition should not have made it its first object either to verify or contradict the alleged existence of man-eating aborigines in the heart of South America. I shall

take to man's unsupported testimony on that score as final, and since Mr. Lange begins the romantic part of his story with a statement of his complete physical collapse I prefer to believe that the closing chapters of his book, which deal with his sojourn among the Mangaromas and his thrilling participation in their battle with the Peruvians, is the aftermath of a regrettable hallucination, resulting from his breakdown.

"**Hawaii and the Panama Canal**," by Elmer E. Paxton, in the *Mid-Pacific Magazine* (Honolulu, Hawaii), is an article dealing with the commercial and material benefits the islands of the Pacific may expect to reap from the opening of the Panama Canal. In this connection the author writes:

Four thousand six hundred miles westward from Panama lie the Hawaiian Islands, the "Crossroads of the Pacific," and America's greatest future naval base. These islands are unique in their location with relation to ocean routes, in their climatic and scenic attractions and in their material resources, considering limited area and population. The opening of the canal is therefore a matter of keenest interest to everyone in Hawaii who has a feeling of patriotic pride in great national achievements, who realizes the important part these islands will play in the national defense, and who looks forward to the great commercial and material benefits which will accrue to the territory under vastly improved transportation facilities * * * .

Hawaii now exports annually \$16,000,000 worth of products to the mainland of the United States, about three-fifths of which goes to the Atlantic seaboard. Practically all of this freight is now transported by steamer to Salina Cruz, Mexico, thence by rail across the Isthmus of Tehuantepec, and then again by steamer to destination. While this route is a great improvement over the long and uncertain voyage around Cape Horn, or the expensive route overland, the large amount of storage and rehandling across Mexico will be eliminated when the all water route is opened through the canal. This will mean quicker delivery, less waste, more steamer lines and consequently lower rates of freight.

Paraguay is the name of an interesting monthly journal, published in English, which made its initial bow last October in Asuncion, the progressive capital of the Republic of Paraguay. Its editor, Mr. W. H. Tress, is to be congratulated on the character of the articles and the general excellence of his magazine. In the United States increasing interest is being felt in the development of the rich natural resources of Paraguay. That great undeveloped section of the country known as the Chaco offers wonderful opportunities for agricultural and pastoral industries, and all that is needed to bring an influx of foreign capital to develop its resources is that these opportunities may be published to the world. North American capitalists have recently invested largely in this section and are starting an era of progress by their activities. In an article in the November *Paraguay*, appearing under the title "Development of Paraguay," we note the following:

Mr. G. L. Rickard, manager and also a director of the Paraguay Land & Cattle Co., reached Asuncion during the current month after an extensive tour in the "Chaco Paraguayo," where his company has acquired a large tract of land for agricultural and pastoral purposes.



LAVER FRONT, AS SEEN FROM THE WATER

This photograph was taken from the water, looking towards the building from the south. The building is the Laver Front, and is one of the largest and most important buildings in the city. It is a fine example of the architecture of the period, and is well worth a visit. The photograph is a good one, and shows the building in all its glory.

The formation of such a company, after a careful study of the land conditions of the country and all its possibilities, at the present moment shows how responsible people have for some time since had Paraguay under observation.

The Republic can not but derive immense advantage by the establishment of this company, and the methods being adopted by Mr. Rickard leave no room for doubt as to the great future of this enterprise. Paraguay is now starting a new era.

Before the purchase by the Paraguay Land & Cattle Co. these large tracts of Chaco land were in the hands of foreign owners, who had secured them for a song some twenty-odd years ago and have been expecting their value to increase as did land in the Argentine and in Brazil; or, in other words, to make a fortune sleeping. These owners did nothing to develop their estates, nor was there ever a cent spent on their improvement, and they had become a source of national danger until North American initiative stepped in, which practically means the opening up of unknown and uninhabited regions, a work of high civilization, resulting in an influx of immigration and circulation of capital.

Within the next few days will arrive some 20 or more North American cowboys, engaged by Mr. Rickard as foremen of the cattle ranch, and as soon as possible after their arrival the company's holdings will be equipped with the most modern facilities required for a large stock ranch.

"Access to Paraguay," a short article in the same issue of Paraguay, gives the following information relative to means of reaching Asuncion:

At present there is but one way to reach Paraguay; that is via Buenos Aires, where one may choose between an overland or a water route. A weekly train service leaving La Corze Station, Buenos Aires, every Saturday at 9 a. m., performs the journey to Asuncion in 80 hours, and within the next few months the ferryboat service, crossing the River Parana from Posadas on the Argentine bank to Encarnacion on the Paraguay bank, will be completed, making it possible to do the journey without alighting from the train in about 56 hours.

Dining and sleeping cars of the very latest improvements, combined with first-class accommodation, built with every modern idea for ease and comfort, perform this service.

Steamers leave Buenos Aires four times a week—Sundays, Tuesdays, Thursdays, and Saturdays—direct for Asuncion.

"The South Pacific Mail" (Valparaiso, Chile) in its February 19 issue has the following, under the title "The Chuquicamata Copper Mines."

The recent purchase of extensive mining properties at Chuquicamata, in the Province of Antofagasta, by "The Chile Exploration Co.," which is controlled by Messrs. A. C. Burrage and Guggenheim Bros., of New York, is now a matter of general knowledge, and considerable interest has been aroused by the announcement.

In view of the important effect this transaction will undoubtedly have on the future copper production of Chile, it is of interest to give some particulars of the new enterprise.

The properties secured by the American financiers include some 50 to 100 mines, the price paid being £180,000. They are situated at an altitude of 8,846 feet above sea level and are tapped by a branch railway 10 miles in length, extending from kilometer 252 on the Antofagasta and Bolivia Railway. Prior to the purchase the property was minutely surveyed by competent engineers, with Keystone drills brought from the United States especially for the purpose.

As a result of the engineering tests, it is estimated that the deposit contains more than 10,000,000 tons of ore, assaying, on an average, 1.64 per cent copper, which would give an output equivalent to 1½ million tons of fine copper, valued at £105,000,000.

The syndicate expect to produce 10,000 tons of ore per day, or about 62,500 tons of copper annually, which is almost double the actual output from the whole of the copper mines of Chile. Once this production is obtained, as well as the full production at the Braden Copper Co.'s mines, Rancagua, which is also controlled by Messrs. Guggenheim, then Chile will rank as the second copper-producing country of the world, the United States being first.

"Progress of Mining in Colombia," by Sias Wright, in the *Engineering and Mining Journal* (New York), for February 22, 1913, is an account of the progress and production of the various gold, silver, and platinum mines of the Department of Antioquia, Colombia, for the year 1912.

The following paragraph, concluding the article, gives the author's advice to prospective investors:

Any mining venture in Antioquia requires considerable capital, even if only for a small hydraulic-elevator plant, and the man with small capital is not likely to be able to bring his enterprise to a profitable stage of production. Most of the mining grounds and veins have been located, and one must therefore deal with the owners, and the prices asked are far above what mere prospects are worth. However, there are excellent chances here for those who come with funds, experience, and other requisites for successful mining. With the building of railroads, such, for instance as the Antioquia, connecting the Magdalena River with Medellin, now being completed, together with the building of new river steamers for the Cauca, Nechi, and Atrato Rivers, the mining regions will become more accessible and freight transportation less costly, and the betterment of traveling facilities is sure to cause a stimulation and expansion of the mining industry of Antioquia.

"Sanitation of the Isthmus," by Joseph Bucklin Bishop, secretary of the Isthmian Canal Commission, in *Scribner's Magazine* for February, is a comprehensive article dealing with the history of the fight against yellow fever and malaria in Cuba and Panama. Mr. Bishop goes into the details of the experiments conducted by the United States Army commission in Cuba in 1900 and 1901. It is to the heroic self-sacrificing work of these surgeons—Walter Reed, James Carroll, Jesse W. Lazear, and Aristides Agramonte—and to the heroism of the young soldiers who voluntarily offered themselves as subjects for their experiments that the world owes its victory over one of the greatest scourges known to mankind. Dr. Carlos J. Finlay, of Habana, had been the first to positively assert that the disease was transmitted from one person to another through the bite of the germ-carrying mosquito, but the theory had lacked the confirmation of systematic experiment until this commission set to work. The theory once established and the fact that the only medium of transmission is the female *stegomyia* being ascertained, it remained for Col. W. C. Gorgas to conduct the most wonderful campaign against the most

dreaded of tropical diseases. His success in Habana placed him at the head of the department of Sanitation on the Isthmus of Panama. As a result of this work there has not been a single case of yellow fever on the Isthmus since December, 1905, which originated there. The few sporadic cases which have occurred were all brought in from other ports, and in each instance the patient has been segregated and there has been no infection of others. To appreciate the extent of the task accomplished by Col. Gorgas and his staff one must read such an article as that of Mr. Bishop.

"**The Mineral Resources of Chile**," in the Mexican Mining Journal for March, 1913, is a partial reproduction of Mr. Charles L. Harrington's



ENTRANCE TO A COAL MINE AT LOTA, CHILE.

article in the Colorado School of Mines Magazine. The location, activity, and prospects of copper, nitrate, gold, lead, iron, and coal mines are briefly dealt with, while incidental mention is made of the tin, tungsten, and borax mining industries. According to Mr. Harrington, Chile, the largest copper producing country in South America, has furnished about one-third of the world's supply for more than 60 years. One of the largest copper mining companies, located southwest of Valparaiso in the Andes, is said to have a production of 40,000,000 pounds of copper a year. It is capitalized at \$14,000,000. In 1911 Chile's total copper production amounted to \$7,635,000 pounds.

"**Banking Laws and Methods of Cuba,**" by William H. Morales, secretary National Bank of Cuba, is a comprehensive and yet concise compilation of banking and business laws and customs which obtain in the island Republic, published in the February number of *The Cuba Review* (82-92 Beaver Street, New York City). The information contained in these five printed pages is such as is needed by every man who expects to do business in Cuba or with Cuban merchants. Having as yet had no opportunity for comparison with the original texts, we are unable to vouch for the accuracy of Mr. Morales's compilation in all its details, but presume it to be reasonably correct.

"**Das Sanierungswerk der Nordamerikaner auf Cuba und in Panama,**" by Dr. Otto Lutz, professor of the National Institute, Panama, is an article in the January 15 issue of *Süd-und Mittel Amerika* (Berlin, W. 35 Lutzowstrasse 102-104) which deals with the remarkable work of the United States Army surgeons in freeing Habana, and subsequently Panama, from the terrible yellow-fever scourge. Dr. Lutz goes into the matter with the characteristic German thoroughness, deals with the history of the disease in tropical America from the time when Columbus first noted the fact that some of his men contracted a disease which turned them "yellow as saffron," down to the recent past when the experiments of Dr. Finlay, of Cuba, subsequently verified by those of Dr. Reed and other American surgeons, established the fact that the female *Stegomyia* was the transmitter of the dreaded infection. The wonderfully efficient work of Col. Gorgas in the sanitation of Habana and his more recent triumph at Panama is dealt with at some length, and the sanitary measures which made possible the successful completion of the canal are treated with considerable detail. The contrast between the American methods of dealing with the problem of tropical diseases and those of the French is shown in some startling facts and statistics. The percentage of deaths from yellow fever among all classes of employees during the French régime is appalling. That the unhealthy conditions prevailing in the Canal Zone during the French occupation, conditions which they seemed unable to ameliorate, were largely responsible for their disastrous failure goes without saying.

To anyone desiring to learn something of the details of the most stupendous sanitation work ever undertaken, a work without which the greatest engineering feat known to the world would have been impossible, we commend Dr. Lutz's two articles in the January 15 and 29 issues of *Süd-und Mittel Amerika*.

BOOK NOTES

Early Man in South America. Bulletin 52 of the Bureau of American Ethnology, Washington, D. C., 405 pp., 68 plates, illus.

Five years ago the Bureau of American Ethnology published a bulletin on "Skeletal Remains Suggesting or Attributed to Early Man in North America," based on the researches of Dr. Aleš Hrdlička, Curator of Physical Anthropology in the United States National Museum. There has recently appeared in similar form, under the title of "Early Man in South America," a résumé of the investigations of Dr. Hrdlička, in collaboration with Mr. W. H. Holmes, head curator of the Department of Anthropology in the United States National Museum, Mr. Bailey Willis of the United States Geological Survey, and Messrs. Fred Eugene Wright and Clarence E. Ferner, of the Geophysical Laboratory of the Carnegie Institution of Washington.

Even before the completion of his report on ancient man in North America, Dr. Hrdlička became interested in the evidence bearing on the corresponding problem in South America, and subsequently, at the suggestion of Mr. W. H. Holmes, he was sent by the Secretary of the Smithsonian Institution, to visit Argentina for the purpose of making a study at first hand of the available material and an investigation of the most promising regions.

In view of the important position occupied by geology in studies of this nature, Mr. Bailey Willis, of the United States Geological Survey, was chosen to accompany Dr. Hrdlička.

The chief objects of the expedition were: The examination of the skeletal remains relating to early man in Brazil and Argentina; the study of the principal localities and deposits from which these finds came; and, if possible, the collection of osseous, archeologic, and other specimens bearing on the subject of man's antiquity.

The party reached Argentina early in May, 1910. Dr. Hrdlička spent two months in that country, while Mr. Willis remained somewhat longer, nearly all of this time being given to the researches recorded in the report. The work was greatly facilitated by several of the local men of science, and the authors express warm appreciation for the valuable assistance thus rendered. Several localities in Buenos Aires where local exposures could be studied, including the dry dock where the "Diprotomo" skull had been found some time before, were carefully examined. On May 24 the party set out for the coast, where important specimens had been discovered, and a few days later were joined at Mar del Plata by the late Prof. Florentino Ameghino and his brother Carlos, who assisted the expedition materially, accompanying Dr. Hrdlička and Mr. Willis for more than three weeks from place to place on the coast, and to several inland points of interest.

After the completion of a general survey, Dr. Hrdlička visited the Valley of the Rio Negro, whence came several fossil crania many years ago, while Mr. Willis proceeded to Arroyo Siasgo and Alvear, to study the geology of these Territories and several specimens of baked earth supposed to be the product of ancient human industry. Early in July both explorers met again in Buenos Aires, and after finishing their work in that region started for Ovejero, a locality in northwestern Argentina that has come into prominence in the last few years through its yield of human bones; they also visited Treman, San Juan, and Mendoza. Dr. Hrdlička then proceeded to Peru, while Mr. Willis returned to Buenos Aires.

The researches occupied nearly three months. Every specimen relating to ancient man that could be found was examined and every important locality was investigated. Unfortunately the general results of the inquiry are not in harmony with claims previously made by the various authors who reported the several finds. On the contrary

One cannot say that the present state of the evidence is altogether favorable to the hypothesis of a common ancestry, especially as the existing races are only predecessors of the Indian in South America; nor does it sustain the theories of the evolution of man in general, or even that of an American race alone, in the southern continent. The facts gathered attest everywhere merely the presence of the already differentiated and relatively modern American Indian. This should not be taken as a categorical denial of the existence of early man in South America, however improbable such a conclusion may now appear; but the position is maintained that the final acceptance of the evidence on this subject can not be justified until there is accumulated a mass of strictly scientific observations, requisite in kind and volume, to establish a proposition of so great importance.

The expedition secured numerous geological, paleontological, and anthropological specimens, some of which throw light on the question under investigation. All these specimens have been deposited in the United States National Museum for further study, and exhibition. C.

Venezuela. By Leonard V. Dalton, B. Sc. (Lond.). With a map and 34 illustrations. London: T. Fisher Unwin. New York: Charles Scribner's Sons. 1912. Large 12mo. 320 pp. Price 10s. 6d. (say, \$2.50).

This book is one of the latest of "The South American Series" issued by the publishers, in London, and in New York, preceeding volumes having dealt with Argentina, Mexico, Chile, Brazil, and Uruguay. There are 18 chapters and 5 appendixes, with a very complete bibliography covering the different phases of the subject matter of the various chapters. Beginning with the "Physical Description of the United States of Venezuela," the author examines the geological history; the fauna and flora; the condition of the country before and during the Spanish rule; the development of the Republic; the aborigines; modern Venezuela; and concludes with a succinct analysis of the several States, the development of the Republic, present means of communication and transport, and a judicious estimate of the probable future. Taking the book from cover to cover, it presents the most complete guide to Venezuela that has yet been published. The author has the happy faculty of expressing his views clearly, and at the same time of avoiding opinions on matters that are not at all understood by the general reader, but which are still the subject of controversy by students of history and politics. While it has been impossible for him to enter into elaborate detail, he has prepared what may be called a guidebook to Venezuela, in which facts as to climate, industry, travel conditions, natural opportunities, and general characteristics are set out clearly before the reader. The illustrations are almost all attractive and well done. The map at the back of the volume, unfortunately, lacks in sharpness, and however accurate it may be, it appears so sketchy that errors are apt to occur in interpreting its indications. A. H.

Copyright: Its History and Its Law. Being a summary of the principles and practice of copyright, with special reference to the American Code of 1909 and the British Act of 1911. By Richard Rouse Hull, Esq., LL.D. New York: Houghton, Mifflin Co., 1912. 709 pp., of which 247 are appendices and index. \$5 net.

The author of this work is the able and painstaking editor of the Publishers' Weekly. He is the first vice president of the American Copyright League, and to him perhaps as much as any other single man is due the awakening of the American conscience, and in particular the conscience of that small but potent body of Americans known as the Congress of the United States, to the rights of intellectual property internationally considered. The result of this awakening was the passage of the act of Congress approved on the last day of his term by President Roosevelt, March 4, 1909.

Neither the author of this book nor the Copyright League, of which he was one of the founders and is one of the most active officials, nor the other friends of literary and artistic property rights, who for so long a time and so persistently contended against international piracy of these rights, are in any way responsible for the "manu-

facturing" clauses of the act of 1909. The author continues to fight on the old lines for universal recognition of intellectual property rights without restriction. In fact, his book, viewed largely, is an argument, and a very able one, for the proposition that a man's ownership in the creations of his brain should be no less secure nor less enforced than is his ownership of the coat on his back or the coin in his pocket.

Toward this ideal Mr. Bowker recognizes the Pan American conventions of Mexico, 1902, of Rio de Janeiro, 1906, and of Buenos Aires, 1910, as being steps forward, even in advance of the Berne convention, of 1856, and the Berlin convention, of 1908. The Pan American conventions were signed ad referendum by the delegates from all or nearly all the American Republics to the Second, Third, and Fourth International Conferences of the American States meeting in Mexico City, Rio de Janeiro, and Buenos Aires. The United States Senate approved the convention of Mexico in April, 1908, and the convention of Buenos Aires in February, 1911. It has not approved the Rio convention.

It is to be regretted that among the appendices to the author's work he has not, along with the English version, given the French or Spanish version of the Buenos Aires convention. Of course, Mr. Bowker was precluded from making an independent translation into English of the text of any of the other idioms by the fact that the English, French, Spanish, and Portuguese versions of the convention are all made originals and as such have equal weight. However, the English version is so very bad as to leave cloudy and almost, if not entirely, meaningless ideas clearly and adequately expressed in the other idioms. For instance, the clause as to reciprocity reads in the Spanish: "El reconocimiento del derecho de propiedad obtenido en un Estado, de conformidad con sus leyes, surtirá de pleno derecho sus efectos en todos los demas," etc. In the French: "La connaissance du droit de propriété obtenir dans un État, conformément à ses lois, produira de plein droit ses effets dans tous les autres." The Portuguese is equally well rendered. The English is: "The *acknowledgment* of a copyright obtained in one State, in conformity with its laws, *shall produce its effects of full right* in all the other States."

The United States has not ratified the Berne and Berlin conventions. What is to be the result of its ratification of the Buenos Aires convention? The author seems to answer the question thus: "When the Buenos Aires convention is ratified by other powers (i. e., the other signatories) nothing more will then be required than the usual application and deposit in Washington and notice of the reservation of rights, preferably in connection with the copyright notice, of which 'all rights reserved for other countries' is the most comprehensive form" (p. 339); and "The ratification of the Buenos Aires convention by the United States Senate, February 16, 1911, has the effect of authorizing the President to proclaim reciprocal relations with other countries which are parties to that treaty as each ratifies the convention" (p. 112).

Lawyers no doubt will be surprised, if the author be correct in his deductions, to find that we, even in the restricted area of Latin America, are already so near full international copyright without restrictions, for this is what the Buenos Aires convention means. A treaty is the supreme law of the land. About this there can be no doubt. But how to apply this fundamental legal truism to this convention. Does it, in so far as the two are inconsistent, repeal the provisions of the 1909 act? How about the "manufacturing" clauses? Is the Buenos Aires convention, admitting that all formalities of proclamation, exchange of ratifications, etc., be complied with, self-executing, and if so, to what extent? Does it require legislation by Congress to make it effective, and if so, as to what provisions thereof and to what extent? In other words, is it, as it stands and unsupported, anything more than a contract between the ratifying countries to which the citizens thereof are not privy?

There is a long line of decisions by the United States Supreme and Circuit Courts treating of all of these questions. For instance, it has been held that the international conventions for the protection of industrial property concluded at Paris, March 20, 1883, was in the nature of a contract between the parties thereto and is not self-executing; that it requires legislation by Congress to render it effective; that, wanting such

legislation, the filing of an application for a patent in a foreign country gave no rights of priority in this country; that wanting such legislation a foreigner could not file a caveat. On the same lines the decision of Chief Justice Marshall in *Foster v. Nelson* (2 Pet., 253) and of Justice McLean in *Turner v. Baptist, etc.* (5 McLean, 344), are interesting.

In writing this book the author seems, neither as a historian of the law as it was nor as a commentator of the law as it is, to lose sight of his brief for the law as it should be. From the professional standpoint this, if it be true, is unfortunate, for from this standpoint a law text writer should confine himself to expounding the law as he finds it and from this standpoint also he should be careful to find all the law.

However, there are other standpoints, many of them, and from these the author has written a very interesting book, which should have, and will have, if it fails not of its promise, weight in bringing into effective operation, here and elsewhere, laws for the suppression of all forms of literary and artistic piracy. W. C. W.

Illustrated South America. By W. D. Boyce. Rand, McNally & Co., Chicago and New York. 638 pages. Price, \$2.50.

A most instructive and a highly entertaining book dealing with each South American country. Its varied and breezy style of composition breathes of the vast plains and mountains where it was written; for it is primarily a book from the fields, as the author sent most of the original matter to his Chicago papers in the form of "copy," which has now been collected in book form.

The writer of this review met the author of the book in north Argentina and was greatly impressed by the systematic and thorough methods of securing data and information which the latter was pursuing. Mr. Boyce had with him a secretary, a photographer, and a servant, and as the four gatherers of facts proceeded from place to place, their preparation for the work was noteworthy and unequalled. The little party proceeded to far interior sections, and their jaded appearance indicated that some rough experiences had been passed through during their wanderings. With his assistants the author visited the wilds of eastern Peru; traveled over Argentina pampas to the yerba mate country of Paraguay; to the far-off Falklands; up the mighty Amazon, the Magdalena, and other great water courses; visited numerous Indian tribes and met the day laborers in many sections of the continent, and in so doing he kept his photographer busy, with the result that 500 splendid illustrations—most all of which are new to the world—add a most attractive and charming feature to the well-written text.

As a whole, the book commends itself to the public, but, of course, there are opinions advanced that may not meet the approval of those of us who have spent years with the Latin peoples. The author devoted more than a year to visiting South America, but his work kept him wandering from country to country, which are quite as different in many respects as are our own States, such as Maine and Arizona or Minnesota and Florida. The matter is generally newsy rather than historic, and in the language of the author, "the literary manner as uneven and changeful as the country and experiences through which the writer passed."

The author of the book being a man of wealth and a seasoned traveler of many sections of the world, as well as one of the country's most active and leading publishers, his book should be read by all who are interested in the better acquaintance and friendship between the peoples of the two continents, now about to be rent asunder that we may become better acquainted.

All over South America Mr. Boyce received many honors at the hands of officials of the various Governments who paved the way for his extended wanderings, which in the end furnish much matter and numerous pictures of life and conditions far from civilizing influences; while his visits to the great cities and commercial centers offered opportunities and subjects which have been most admirably as well as interestingly treated. *Illustrated South America* should find its way to our libraries and reading rooms, and its pages will do much to increase and inspire our interest in the progress and welfare of our neighbors of the great southern continent. W. A. R.

SUBJECT MATTER OF CONSULAR REPORTS.

REPORTS RECEIVED UP TO APRIL 15, 1913.¹

Title.	Date.	Author.
ARGENTINA.		
Foreign trade of Argentine for year ended Dec. 31, 1912.	1913. Feb. 18	R. M. Bartleman, consul general, Buenos Aires.
Wool shipments from the River Plate from Oct. 12 to Dec. 31, 1912.	Feb. 21	Do.
Wine industry, 1912.	Feb. 25	Do.
BRAZIL.		
Chocolate, cocoa, candies, and confectionery.	Mar. 5	D. R. Birch, consul, Bahia.
Newspapers.	Mar. 22	Geo. H. Pickerell, consul, Para.
CHILE.		
Annual commercial and industrial district report.	Feb. 28	A. A. Winslow, consul, Valparaiso.
Internal-revenue tax on cigars, cigarettes, and tobacco.	Mar. 10	Do.
CUBA.		
Preliminary report on commerce and industries for 1912.	Mar. 20	James L. Rodgers, consul general, Habana.
Populations of towns of district.	Mar. 24	R. E. Holaday, consul, Santiago.
Annual report on commerce and industries, Cienfuegos.	Mar. 26	M. Baehr, consul, Cienfuegos.
Stoves and ranges.	Mar. 29	R. E. Holaday, consul, Santiago.
Prospective pineapple crop of Cuba.	do.	James L. Rodgers, consul general, Habana.
Progress of the 1912-13 tobacco crop.	do.	Do.
Character of the Cuban foreign and domestic trade.	Mar. 31	Do.
GUATEMALA.		
Graphite products.	Mar. 12	Geo. A. Bucklin, consul general, Guatemala City.
Acetylene lighting outfits.	Mar. 13	Do.
Representing Guatemala exports in New York.	Mar. 18	Do.
Bicycle and motor cycle importing firms.	Mar. 22	Do.
MEXICO.		
Annual report of commerce and industry of Durango district for calendar year 1912.	Mar. 5	Luther T. Ellsworth, consul, Ciudad Porfirio Diaz.
Raffia (fiber not produced).	Mar. 14	Clarence A. Miller, consul, Tampico.
Laundry machinery—no market.	Mar. 18	Warren W. Rich, vice consul, Salina Cruz.
Cotton factory in State of Sinaloa.	do.	Wm. E. Alger, consul, Mazatlan.
Tonnage of exports and imports.	Mar. 19	Clarence A. Miller, consul, Tampico.
Mahogany and other woods in Campeche.	Mar. 20	Wilbur T. Gracey, consul, Progreso.
Graphite products.	Mar. 21	Thos. W. Bowman, consul, Nogales.
Typewriters.	do.	Do.
Typewriters and office supplies.	do.	Warren W. Rich, vice consul, Salina Cruz.
Annual report of commerce and industries, Coahuila, year ended Dec. 31, 1912.	Mar. 22	Luther T. Ellsworth, consul, Ciudad Porfirio Diaz.
Chocolate, cocoa, candies, and confectionery.	Mar. 23	Clarence A. Miller, consul, Tampico.
SALVADOR.		
Annual report on commerce and industries, calendar year 1912.	Mar. 8	Thomas Hinckley, consul general, San Salvador.
Chocolate, cocoa, candies, and confectionery.	Mar. 18	Do.
Assignment of import duties to certain articles.	Mar. 19	Do.
Change in certain Salvadorean consular regulations.	Mar. 20	Do.

¹ This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this institution.

Reports received up to April 15, 1913—Continued.

Title.	Date.	Author.
URUGUAY.		
Sheep-dip factories in Uruguay.	Feb. 5	Frederic W. Goddard, consul, Montevideo.
Regulation of law on import duties on prime materials and exemptions to industrial companies.	Feb. 27	Do.
Delays in shipment of goods detrimental to American trade.	Mar. 5	Do.
Improved shipping facilities for River Plate trade.	Mar. 6	Do.
Successful banking in Uruguay.	do.	Do.
VENEZUELA.		
Kieselgen or fossil flour (factory no longer in existence).	Mar. 6	Thomas W. Voetter, consul, La Guayra.
Soap (limited market).	Mar. 7	Do.
Balsam wood—not known.	Mar. 11	Do.
Storing explosives—Government regulations.	Mar. 12	Do.
Calomel and corrosive sublimate.	Mar. 17	Do.
Towns affected by building of new roads.	do.	Do.



ARGENTINE REPUBLIC

There are 10 gunny or jute SACK MANUFACTURING ESTABLISHMENTS in active operation in Buenos Aires from November to March of each year. These factories employ 2,257 hands, of which 619 are men, 1,349 women, and 289 boys and girls under 16 years of age.—The PEDAGOGIC CONGRESS which recently met in Cordoba, Argentina, recommended, among other things, the desirability of establishing urban and rural schools, the increase of the number of normal schools, preference in the employment of graduates as teachers, greater liberty for teachers in the management of schools, and a change in the curriculum and methods of teaching in the normal schools of the country.—The President of the Republic has authorized the SOUTHERN RAILWAY to construct a branch 45.7 kilometers long from San Vicente southward. The Buenos Aires, Ensenada & South Coast Railway will build a 70-kilometer branch from Elizalde station in a southerly direction. The department of public works has given permission to the Buenos Aires Railway to build a branch line 18 kilometers long from Alvear station southward.—The estimated production of MAIZE in the Argentine Republic during the agricultural year 1912-13 is 4,995,000 tons. The estimated area planted is 3,630,000 hectares. —The exports of OATS from the Argentine Republic in 1912 amounted to 896,032 tons, as compared with 511,389 tons exported in 1911.—In 1912 more than 30,000 tons of SUGAR were imported into the Argentine Republic.—During the 10 years from 1902 to 1911, inclusive, the production of BEER in Argentina rose from 27,900,702 liters during the former year to 100,252,199 during the latter year. The imports of beer in 1902 were 209,732 liters as compared with 770,110 liters in 1911.—On February 28 of the present year the CONVERSION OFFICE in Buenos Aires had on hand 240,580,974 gold pesos.—Bulletin No. 15 of the bureau of commerce and industry of the Argentine Republic shows that at the close of 1911 there were 661 TOBACCO FACTORIES in the country with a capital of 21,571,268 pesos, and annual sales amounting to 51,087,057 pesos.—The EXPORTS of Argentine products in 1912, as compared with those of 10 years ago, or 1903, expressed in Argentine gold pesos, were as follows: Stock products, 1903, 109,181,342; 1912, 188,215,956. Agricultural products, 1903, 105,251,309; 1912, 278,186,572. Forestal products 1903, 3,472,708; 1912, 8,983,112. The exports of some of the principal articles were as follows: Corn, 1903, 2,104,384; 1912, 4,835,237. Wheat, 1903, 1,681,327; 1912, 2,629,056. Flour, 1903, 71,980; 1912, 131,580.—The Anglo Argentine Co., an English corporation with

a capital of £15,800,000, is owner of the greater part of the STREET RAILWAYS of Buenos Aires. The length of the trainways in the Federal capital belonging to this company is 339 miles, over which cars are operated to the number of 2,456. The gross receipts of the company in 1912 were £2,708,000, as compared with £2,568,000 in 1911. In 1910 the company was authorized to construct three tunnels within the city limits aggregating a length of 8 miles. According to the terms of the concession the street railway holdings of this company, including rolling stock, shops, etc., will become the property of the municipality of Buenos Aires in 1990. —According to the report of the consul general of the Argentine Republic in England, the total COMMERCE of Argentina WITH GREAT BRITAIN, in 1912 amounted to 251,377,630 Argentine gold pesos, of which 195,298,785 were exports from the Argentine Republic, and 56,078,845 were imports of the Argentine Republic from England. —La Argentina Economica is authority for the statement that the investments of ENGLISH CAPITAL in the Argentine Republic at the present time aggregate 1,000,000,000 Argentine gold pesos in railways and 1,500,000,000 Argentine gold pesos in land and other enterprises. During the last few years eight English railway companies operating in Argentina, after paying the regular dividends, have accumulated a reserve fund amounting to 32,851,271 Argentine gold pesos. —In 1912 the total production of WINE in the Argentine Republic amounted to 4,083,459 hectoliters of an estimated value of 94,000,000 pesos national currency. The Province of Mendoza is credited with about 85 per cent of the total vintage of the country. —An experiment has been made in the Province of Mendoza in the CULTIVATION OF BEETS for sugar. A well-known variety was planted, and in 750 square meters (8.073 square feet, or about one-fifth acre), sown in August, 1,200 kilos (2,645 pounds) of beets were obtained in February. After this excellent result, the beet-sugar industry may soon become an important one in that Province. —At Chivilcoy an AGRICULTURAL COOPERATIVE SOCIETY is being formed for the further protection of the agriculturists of that district. The capital has been fixed at \$200,000. It will open a bank for advancing loans to "chacareros" and stores which will supply goods to their members at cost price. —There has been such a shortage of tonnage this year in comparison with the amount of cargo that up to now it has been impossible to fulfill orders for LINSEED to the United States. This week (mid-March) the first shipment of this cereal, 2,400 tons, left, to be followed by others, filling important contracts. The North American industry for about four years has had recourse to Argentine linseed for its consumption, not only owing to their poor crops, but also on account of the superior quality of the Argentine linseed.

BOLIVIA

Press reports state that on February 26 of the present year Gen. Ismael Montes negotiated a loan in Paris for the construction of the TUPIZA TO LA QUILACA RAILWAY. This is one of the most important railways under construction in Bolivia, inasmuch as it will pass through a rich agricultural and mineral section of the Republic. In addition to encouraging and promoting the development of agriculture and mining, the line, when completed, will unite La Paz by rail with the city of Buenos Aires. The loan, which bears 5 per cent interest and provides for 1 per cent amortization, was placed at 90 per cent and 4 per cent commission. According to the conditions of the contract the funds for the construction of the railway referred to are not to be used for any other purpose. Complete amortization of the bonds is to be made within a period of 37 years.—The CABINET of the President of Bolivia, as published in *El Comercio*, is as follows: Alfredo Ascarrunz, foreign relations; Claudio Pinilla, interior (gobierno); Alejandro Soruco, finance; José Santos Quinteros, justice; and Juan Maria Zalles, war.—Preliminary steps have been taken for the FUSION OF THE INDUSTRIAL AND NATIONAL BANKS of Bolivia, and if the arrangements are completed the result will be a very powerful financial institution with a large and profitable business already established and with a prestige unexcelled by any banking institution in the country.—The net earnings of the NATIONAL BANK OF BOLIVIA in 1912 were 537,276.07 bolivianos, which added to the fund on hand for future dividends, 367,049.07 bolivianos, made the total amount available at the close of the year for the payment of dividends and other uses 904,325.14 bolivianos. This amount was distributed as follows: Government tax of 10 per cent on the net earnings, 53,727.60 bolivianos; reserve and extra funds, 50,000 bolivianos; dividend on 65,000 shares, 390,000 bolivianos, and funds for future dividends, 400,597.54 bolivianos. The earnings of the bank at the main office and branches, expressed in bolivianos, were as follows: Central office, 200,112.41; La Paz, 101,126.27; Cochabamba, 64,283.78; Oruro, 48,689.15; Potosi, 33,987.65; Tarija, 40,006.75; Tupiza, 30,000; and Uyuni, 19,070.06. The capital of the Bank of Bolivia at the beginning of the present year was 6,500,000 bolivianos; reserve fund, 950,000; fund for unforeseen expenses, 210,000; and fund for future dividends 400,597.54 bolivianos, or a total of 8,060,597.54 bolivianos. In view of the satisfactory condition of the bank the employees were given a bonus of 6 per cent of their salaries for the last six months of 1912. At the beginning of the present year the deposit of gold on hand in

the National Bank of Bolivia and its branches was valued at 5,383,393.75. —Sr. Don Adolfo Ballivian, consul general of Bolivia at New York, has compiled figures showing that the exports through the port of New York to Bolivia in March, 1913, were invoiced at \$104,883.31. Nearly all of these goods were shipped via Mollendo, Peru; Antofagasta, Chile; Pará, Brazil; and Arica, Chile. The commerce consisted principally of cotton goods, machinery, hardware, kerosene, and drugs and medicines. —A recent press dispatch announces that Don Macario Pinilla has been appointed Bolivian minister to France, Holland, and Spain. —It is reported that the Bleriot Co. has proposed to the Bolivian Government to have the Italian aviators, the Rapini brothers, install the new school of aviation, the charges to be at the rate of \$400 gold for each pilot instructed.



BRAZIL

The budget of Brazil for 1913 appropriates, in round numbers, the equivalent of \$65,000,000 for the use of the department of public works. Press reports state that a very large part of this sum will be used in RAILWAY CONSTRUCTION carried on in accordance with a general plan to meet the special needs of the different States of the Republic. One of the lines to be built in southern Brazil, and which has an approximate length of 227 kilometers, will pass through Eley Mendes and open up a rich mining and agricultural section of the country. The President of Brazil has been authorized to contract for the construction of the following lines: From Recife to Pedras do Fogo, in the State of Parahyba, with an approximate length of 132 kilometers and at a maximum cost of \$25,000 per kilometer. The State of Pernambuco has already made preliminary plans and surveys for this railway, and these will be placed at the disposal of the contractor to whom the construction of the line is awarded. A railway from Ayrao, starting from the nearest desirable point to Manaus, and extending to the Venezuelan frontier along the Negro River. This railway is to cost not more than about \$30,000 per kilometer. The prolongation of the Parahyba Railway to Patos at a cost not to exceed about \$21,000 per kilometer. A railway from port Mosoro, through the States of Rio Grande do Norte and Parahyba, to the most desirable junction with the Northern Railway of Brazil, at a cost per kilometer not greater than about \$21,000. An extension of the Alagoinhas Railway, in the State of Bahia, to the city of Therezina, via Paulita and Jarcoas, with its terminal at Devias, State of Piahy. For this purpose about \$200,000 were immediately made available for construction work. A branch railway starting at some desirable

point on the Uberaba to Araguay Railway and terminating in the city of Estrella do Sur. A branch line from a point on the Nazareth Railway to unite that line with the Bahia Central Railway which is to be extended to the port of Salinas. For the construction of State railways the Federal Government is authorized to issue 5 per cent interest-bearing bonds to be received by railway contractors at par whenever sections of not less than 10 kilometers of line are opened to public traffic. The Government is authorized to lease unfinished lines to the contractors until such time as the entire lines are completed, after which the railways may be leased by competitive bids for a term of years fixed by the Government, but which in no case shall exceed 60 years. At the time of leasing a State railway the Government shall make an inventory of same and shall fix the freight and passenger tariffs, which shall be revised every 5 years. The Federal Government has authorized the construction of an electric railway from Uberabinha, State of Minas Geraes, through Mattos de Dias, Rio Bonito, Abadia del Buen Suceso, Alfonso Pena and Jatahy, to Pozo Alto, in the State of Goyaz, with a branch to the Sulphur Springs at Burity and to the port of Mongolinho. —Press dispatches state that the steamship companies plying between Brazil and Europe have established a rate for **THIRD CLASS PASSENGERS** of 100,000 reis from Brazil to Europe. —The newspaper O Paiz of Rio de Janeiro states that in 1913 Italian **IMMIGRANTS** to the number of 14,457 entered the Republic of Brazil, most of whom took up their permanent residence in the country. —Important **COAL DEPOSITS** have been discovered in the Negra Mountains in the State of Minas Geraes. An analysis of the coal has not yet been made, but it is reported to be of good quality. —Sr. Gino Sanfelice has been appointed **DIRECTOR** of the military **AVIATION SCHOOL** at Rio de Janeiro. —The legislature recently in session at Para has authorized the governor of that State to negotiate a **FOREIGN LOAN** of £5,000,000 to be used in consolidating the public debt of the commonwealth. —An executive decree has been issued regulating the **OWNERSHIP OF LANDS** in the different States of the Republic, and in the Acre Territory. —The **GEOGRAPHIC HISTORIC INSTITUTE** of Santa Catharina has been organized with headquarters at Florianopolis. —The department of agriculture of Brazil has decided to import a number of fine **BREEDING CATTLE** and sheep from Uruguay for use at the experiment stock farms of the Government in the different States of the Republic. —In the April, 1913, **BULLETIN** mention was made of the authorization of a **RAILWAY** along the coast **FROM RIO DE JANEIRO TO PORTO ALEGRE**. Further interesting details can now be added. This railway is to be constructed officially under the department of public works and roads (Viaçao), and an engineer of that Government division has authority for the organization of a technical commission to prepare the preliminary studies. This commission is com-

posed in part of military engineers, who will advise with the staff of the division of railways. The function of such a line will be not only commercial, but also political and strategic. Communication between the Central States of the Republic with those at the South is carried on to-day by means of ocean steamers and by an interior railway through the interior of the States of Sao Paulo, Parana and Santa Catharina. By this new project, which will keep to the coast as closely as natural conditions will permit, an advance estimate placing the distance to be covered at about 1,550 kilometers (963 miles), and the time of the trip between Rio and Porto Alegre, at the rate of 60 kilometers (37 miles) can thus be fixed at about 25 hours. —The PRODUCTION OF BANANAS IN SANTOS (meaning the entire district with that name) is making extraordinary progress. In 1905 the total of 896,712 bunches came from there; in 1911, 1,887,910 bunches was the product, of which 987,910 were exported to the River Plate ports, 800,000 to the north (Rio de Janeiro) and 100,000 consumed locally. In 1912 (exact figures for 11 months are given) the exportation alone amounted to 1,139,902 bunches at an appraised value of 1 milreis (about 32 cents gold) a bunch. This supply from Santos represents approximately one-third the exportation from the entire Republic. Bananas from Santos are said to be preferred in Argentina and Uruguay, but the quality of those from Santa Catharina is also good, and that State is now making effort to increase its export trade. The Amazon Land Colonization Co. has just published the report made by the special agent, Mr. C. E. Akers, on the RUBBER INDUSTRY. This is considered a serviceable contribution to the study of the entire rubber industry the world over, and will be valuable for those interested in the problem of the development of this product of the Amazon. —Active efforts have been put forward for the COLONIZATION OF THE STATE OF MINAS GERAES. Decided encouragement has been given to colonists to come to that State for settlement, and attention is called rather to its agricultural possibilities than to its mines which have hitherto characterized its industry. In 1912 there were located in nuclei of Minas Geraes 923 families with a total of 6,000 persons, their productive capacity being estimated at about 1,000,000\$000 (say \$325,000 gold). In Bello Horizonte, the capital, plans are underway for the construction of an institution for the reception of immigrants, the location of which will probably be in Calafate, one of the attractive suburbs. —Negotiations are being carried on between the Federal Government and that of the State of Para to adjust, according to article 12 of the law of January 5 of this year, the EXPORT DUTIES ON RUBBER, the changes to take effect January 1, 1914. At present the export taxes are as follows: Para, 22 per cent; Acre, 20 per cent; Matto Grosso, 20 per cent; Amazonas, 19 per cent. It is proposed to uniformize these duties on a basis of 18 per cent for 1914; 16 per cent for 1915; 15 per

cent for 1916; 12 per cent for 1917; down to 10 per cent, the lowest limit set by the law, for 1918. The minister of roads (Viação) has accepted the bids of Srs. Coelho de Magalhães and Miranda for the CONSTRUCTION WORK OF THE PORT OF CORUMBA, in the State of Matto Grosso.—On March 5, 1913, there was published officially the decree conceding to the Sao Paulo-Rio Grande Railway authority to construct and establish a MARITIME STATION at the port of São Francisco, State of Santa Catharina.—Official statements have come from the company having the concession for construction of the PORT DOCKS AT BAHIA, that the dispatches about the ravages by the surf at that point are much exaggerated; harm was done only to the temporary service buildings, but not to the breakwater nor to the quays. No interruption of work was suffered, nor is there any truth to the rumor that the inauguration ceremonies for the opening in April were to be postponed. The minister of public works has signified his intention to take part in this event. The prefectos (mayors) of the cities of Cambuquira, Aguas Virtuosas, and Caxambu, all three of which cities are well known for their natural mineral water, in the State of Minas Geraes, have solicited permission to construct an AUTOMOBILE ROAD to connect these places.—The mineral collection of the National Museum has just been enriched by the addition, a gift of Sr. Coronel Rogociano Pires Teixeira, of a facsimile of the LARGEST BLACK DIAMOND IN THE WORLD, which weighed 3,078 carats, and was found in Brejo da Lama, State of Bahia, in 1895.—The department for the protection against drought has recently authorized the construction of RETENTION DAMS in several parts of the Republic. One is called "Caracol," another "Bomfim," both in the State of Piahy, the latter having a capacity of 3,821,250 cubic meters. Another is to be in the State of Bahia, at Monte Santo, with a like capacity. Another is yet under discussion, but will be built at Augusto Severo in the State of Rio Grande do Norte, and still another "Bom Nome" in Umbuzeiro, State of Parahyba. Many more are projected, for the Government is desirous of supporting the people of the dry area in their earnest to reclaim for agricultural and pastoral use much of the land which needs only water to make it continuously productive.



CHILE

The prosperous condition of some of the principal Chilean CORPORATIONS AND BANKS is shown by the dividends paid to stockholders during the second half of 1912. The Concepcion Gas Co., which has a paid-up capital of 400,000 pesos, paid a 10

per cent dividend during the six months referred to; the Chilean Tobacco Co., with a capital of 7,500,000 pesos, 15 per cent; the Antofagasta Electric Co., with a capital of £60,000, 5 per cent; the Santiago to San Bernardino Electric Co., 6½ per cent; the Bank of Magellan, 10 per cent, and the Dock Co., 8 per cent.—The Government of Chile has offered prizes amounting to £6,000 for plans and specifications of a **MODEL CENTRAL MACHINE SHOP** and four repair shops for the State railways. The first prize will be £4,000 and the second £2,000. Plans and specifications will be received by the Department of Railways of Chile up to November 15, 1913. A special committee of experts will be appointed to examine the plans and specifications submitted and to award the prizes. The Government reserves the right to reject all plans and specifications. Plans not receiving prizes will be returned to the parties in interest.—According to *El Industrial* of Antofagasta, the northern longitudinal **RAILWAY** of Chile, covering a distance of 719 kilometers, was completed in March last. The principal stations of this line are Pueblo Hundido, Aguas Blancas, Baquedano, and Pintados.—Plans for the construction of a **RAILWAY** from Monte Obscuro to Salamanca have been completed, and bids have been requested for the termination of the Alcones to Pichilemu Railway. The sum of 1,000,000 pesos has been estimated as the cost of the exploitation of the Arica to La Paz Railway in 1913. April last was the date fixed for the opening of this line to traffic. The Howard syndicate has been guaranteed 5 per cent interest on £398,659 invested in the construction of Chilean Railways. The railway budget provides 13,521,980 pesos for the shops of the State railways of Chile in 1913.—The sum of 30,000 pesos has been appropriated for the establishment of a practical **SCHOOL OF AGRICULTURE** at Rancagua.—The **GLASS FACTORY** at Rancagua was inaugurated on January 10 last. The factory is thoroughly equipped and begins operations under the most favorable auspices.—Indications of **PETROLEUM** deposits have been discovered at Curacuatín. A committee of Government engineers is to be sent to the neighborhood to drill wells and report upon the district.—A vein of **COAL**, which is said to be of good quality and thickness, has been discovered at Los Abarcas near Cartagena, and a company of Chilean capitalists has been organized to work the mines. A map of the Arauco coal zone is being made by Engineer Adolfo Moreno in accordance with the orders of the department of industry.—The plans and specifications of the commercial **PORT OF TALCAHUANO** have been completed. These include the construction of a channel of a maximum width of 400 meters and a depth of 10 meters, sufficient to admit vessels of deep draft. The wharf and improvements of the port of Taltal have been completed.—The Government of Chile has been petitioned for 30,000 pesos to be used in 1913 in support of the

INDUSTRIAL SCHOOL maintained by the Society for the Encouragement of Manufacture.—Steps have been taken for improving the PORT OF LEBU so that it may be used as an international port. Railways now planned, and some of which are under construction, will connect this port with Bahia Blanca, Argentina, and open up communication with Victoria, Curacuatin, and Lonquimay. It is predicted that this port will become a great coaling station.—The official budget for RAILWAY CONSTRUCTION AND ROLLING STOCK in 1913 contains the following items: 510,000 pesos for the Palomas to Juntas Railway; 507,000 for Monte Oscuro to Salamanca; 419,000 for Molocoton to Volcan; 386,000 for Rancagua to Doñihue; 300,000 for Alcones to Pichilemu; 297,000 for Linares to Colbun; 400,000 for the railway from Chillan to Pinto y Recinto; 240,000 for the Rucapequen to Tome y Penco; 342,300 for Saboya to Capitan Pastene; 397,800 for Selva Obscura to Curacuatin; 550,800 from Gajon to Llaima; 562,500 for Osorno to Puerto Montt, and 689,500 pesos for the Puente Maule Railway.

COLOMBIA

The CENSUS of Colombia for 1912 gives the population of the capitals of the Departments as follows: Bogota, 121,257; Medellin, 71,004; Barranquilla, 48,907; Cartagena, 36,632; Manizales, 34,720; Pasto, 27,760; Cali, 27,747; Ibague, 24,693; Neiva, 21,852; Cucuta, 20,364; Bucaramanga, 19,735; Popayan, 18,724; Tunja, 8,971, and Santa Marta, 8,348. —An order of the department of public instruction provides that FOREIGN PHYSICIANS may practice in Colombia provided they are graduates of and have diplomas from well-recognized universities.—The treasury department has contracted with the German Bank at Medellin for a LOAN of £25,000, payable in 12 months. —A contract made between the department of public works and the Santa Marta Railway Co. on February 11 last obligates the company to build a LIGHTHOUSE on Morro Hill in such a manner that its light and color may be distinguished from those of the other lighthouses of that coast. The light must be visible at a distance of not less than 15 miles. The lighthouse is to be completed within 18 months from the date of commencing construction. The Government is to pay the cost of erection, plus 25 per cent of same, provided said cost does not exceed \$12,500. —The departmental legislature at Antioquia is considering a plan submitted to it for the building of a RAILWAY from Medellin to the Uraba Gulf.—The profits of the Manzinales BANK during the second half of 1912 amounted to \$10,892.70.—From January to October, 1912,

the MUNICIPAL RECEIPTS of Tumaco for the exploitation of the national forests were 92,443 pesos. — A Mexican company, under the name of "Mensajerías," has proposed a contract with the Colombian Government for the RAPID NAVIGATION of the Lower Magdalena River. — The Government of Uruguay recently established a LEGATION at Bogota and appointed Sr. Carlos Blixen as its minister. — The National Academy of Medicine has accepted a gift of \$3,000 from Dr. Manuel Forero for the purpose of founding a MERIT PRIZE to be awarded every two or three years for the best scientific work submitted. — According to the census of the Department of Cauca, the value of REAL PROPERTY in that Department in 1912 was \$8,588,774. — The department of public works has approved the modified plan of the Amaga RAILWAY between kilometers 25 and 43. — On January 28 last an AEROPLANE exhibition was given in Medellin for the first time. — The owners of coffee plantations in the region of Paine and Cundinamarca have planned for the construction of a RAILWAY from a point on the Northern Railway to a point on the Lower Magdalena River about 10 miles from Honda. The road will run through Pacho, Pasunchá, and Carmen de Yacopi. Survey work has already been commenced. — A PUBLICATION entitled "The Banana Zone" (La Zona Bananera), devoted to agriculture, commerce, and industry, has just been established at Santa Marta under the direction of Sr. Samuel G. Nunez. — The consulate of Colombia at Monte Carlo has been made a CONSULATE GENERAL. — The department of public instruction has approved a recommendation of the educational inspector of Putumayo and Caqueta for the establishment of 25 schools, as follows: Three schools for boys and three for girls at Sibundoy and one school for boys and one for girls at each of the following places: Mocoa, San Francisco, Florencia, and Santa Rosa, and one mixed school at each of the following places: San Andres, Descanse, Junquillo, Condagua, Limon, San Vicente, and Puerto Asis.

COSTA RICA

The official newspaper of Costa Rica of March 19, 1913, contains the text of the contract made between the United Fruit Co. and a number of fruit growers along the line of the Northern Railway for the purchase of BANANAS. The contract prescribes the delivery of bananas at stopping points alongside the railway, provides for the right of way of the Northern Railway through the banana plantations of the parties to the contract, as well as the ceding of a strip of land along the main line of the railway and such branches as may be built

through the lands of the banana growers. The making of this contract will tend to stimulate the cultivation of bananas in Costa Rica in the district referred to and settles in a manner satisfactory to the parties in interest the disputes which have arisen in regard to rights of way, sale of bananas, etc.—On April 15 last bids were opened by the Government of Costa Rica for material, accessories, and piping for the **WATER WORKS** at Jesus de Santa Barbara de Heredia, Rio Segundo de Alajuela, San Pedro de Barba, San Francisco y El Barreal de Heredia, Hatillo de San Jose, Mercedes de Heredia, San Marcos de Tarrazu, San Francisco Dos Rios, Guadalupe de Goicochea, Turrucares, Desamparados, San Jose de Alajuela, Zarcero, Santo Domingo, and Tejar de Cartago.—The municipality of Palmares has contracted with Hopkins & Orlich for **ELECTRIC LIGHTING** of the village of Palmares, the installation to be completed within six months. The contractors also agree to furnish electric light and power to private persons in the village referred to. The contract is for a term of 16 years. —The Government has requested bids for establishing and maintaining a service of **MARITIME COMMUNICATION** by steam power or gasoline motors for freight and passenger traffic between Puntarenas and the ports of the province of Guanaacaste, the service to be in operation not later than July 21, 1913. The boats for this service must be large enough to transport on deck 15 tons of freight and 30 first and second class passengers. The contractor must carry the mails free and keep the wharves used in the service in repair. The longest route contemplated is from Puntarenas to Ballena, a distance of 82 miles. A concession will be granted for 10 years. —The installation of the **WATER MAINS** in the Higuito de San Mateo district, in accordance with a contract made by Engineer Eusebio Ortiz with the municipality of that canton, which contract was approved by the department of public works, has begun. Work has also been commenced on the dredging of the Rio Grande de Térraba for the purpose of facilitating navigation between the different places located on and tributary to that stream.—The department of fomento has ordered the director general of public works to prepare a plan for the construction of a **BRIDGE** over the Jerico River between the village of Acosta and Tablazo. It is proposed that the cost of construction be defrayed jointly by the municipality and the Federal Government.—Bids were received on April 5, 1913, for the construction of a **MARKET** at Puntarenas, the same to be completed within 10 months after the contract is signed. —Sr. Antonio Cuyas Gonzalez has been appointed **CONSUL** ad honorem of Costa Rica at Las Palmas, Canary Islands, in place of Sr. Salvador Cuyas Prats, deceased.—Juan Alvarado Chavez, of Grecia, Costa Rica, has petitioned the Government for a concession of 200 liters of water per second from the Rosales River in the jurisdiction of the district of Puente de Piedra, for the purpose of developing power to run sugar

and hulling machinery and in order to generate power for lighting and other purposes. — A bid was recently submitted to the Government of Costa Rica by the local agent in San Jose of a fruit company for the construction and exploitation for 50 years of an **ELECTRIC TRAMWAY** between Alajuela and Grecia with a branch line to San Pedro de Poas, for a lump sum of 1,378,000 colones. The length of the proposed tramway is 25 kilometers. The price mentioned includes a hydroelectric plant estimated at 600,000 colones. The Government did not accept the bid but entered into further negotiations regarding the matter. — A contract has been made with an English company for the erection of two **SCHOOL BUILDINGS** in the city of San Jose, at a cost of £18,600 and 215,000 colones, respectively.

CUBA

The **RAILWAY** line between Sierra Morena and Sagua has been completed and was officially opened to public traffic on April 15. This line, which was constructed under a Government subsidy, is to be extended to Coralillo. The road runs through a rich sugar cane producing district. — The delegates of the Government of Cuba to the **FOURTH INTERNATIONAL CONGRESS OF SCHOOL HYGIENE**, to be held in Buffalo, New York, in August next, are Drs. Jose Antonio Lopez del Valle, Diego Tamayo, Jorge Ponce, and Oscar Ugarte. — A company has been organized in Cardenas to take over and operate the **SUGAR REFINERY** at that place. The plant is to be enlarged, a wharf built, and a channel dredged deep enough to allow large vessels to load and unload at the wharf. It is estimated that about \$200,000 will be invested in the enterprise. — The Graphic Publishing Co. of Habana has decided to issue an **ILLUSTRATED WEEKLY** under the name of "Gráfico." Sr. Conrado Massaguer, a Cuban cartoonist, is president of the company. The publication will be issued every Saturday, with engravings in two colors and excellent literary matter. — The city of Habana is to have a new **PARK**, 167 acres of land having been donated in a beautiful suburb of the metropolis by Madame Rosalia Abreu. It has been suggested that this new park be used for Habana's zoological garden. — The National Association of Veterans of Cuba has started a plan for the erection of an equestrian **STATUE** to Gen. Maximo Gomez in one of the parks of the city of Habana. The necessary funds are to be obtained by popular subscription. — The **MUNICIPAL BUDGET** of the city of Habana for 1913 estimates the receipts at \$3,892,742 and the expenditures at \$4,724,323, leaving a deficit of \$831,581. — Statistics of the Cuban Central Railway show that up to March 13 last that line had transported during the past

season 839,459 sacks of SUGAR to the ports of Cienfuegos, Sagua, and Caibarien.—The department of public works has been authorized to arrange for the improvement of the AQUEDUCT of Santiago de Cuba in the San Juan Valley.—A new SUGAR MILL is to be constructed in the district of Camaguey by Sr. Vicente Perez, a plantation owner and merchant of Ciego de Avila. The building and equipment is estimated to cost, approximately, \$800,000 and will have a capacity of producing 155,000 bags of sugar per annum. The site of the factory is the Recreo plantation, south of the town of Ciego de Avila. The mill will be ready for grinding in December next, and contracts have already been made for a supply of sugar cane from neighboring plantation owners.—The city of Trinidad has been authorized to receive its WATER SUPPLY from the Tayaba Aqueduct. Work has been discontinued on the Trinidad Aqueduct owing to the great cost of completing the same, and the unexpended balance of \$30,406 for that work has been transferred to the fund for the enlargement and extension of the service of the Tayaba Aqueduct. —The Official Gazette of March 27, 1913, contains the full text of the EXTRADITION TREATY made between Venezuela and Cuba and recently ratified by the Senate. Press reports advise that the department of state of the Republic of Cuba will soon distribute a volume containing all the treaties entered into by Cuba with other countries from the establishment of the Republic to the present time.—The city of Guanabacoa is to have one of the largest CONFECTIONERY AND BISCUIT manufacturing establishments on the Island. Romeau, Valea & Co., who are erecting this factory, have placed orders for machinery amounting to \$400,000, all of which is to be installed within six months. The company is experienced in the business and already has a large established trade. More than 500 men will be employed in the new factory, and use will be made of 5 automobile delivery wagons and 30 horse-drawn wagons in conducting the business and distributing the products of the factory.—The Habana Provincial Council has approved the construction of 4 kilometers of HIGHWAY between Palos and Pipian, as well as the construction of a road from Tumba Cuatro to San Antonio del Rio Blanco.

DOMINICAN REPUBLIC

The legation of the Dominican Republic in Washington has advised the MONTHLY BULLETIN that the new PRESIDENT of the Dominican Republic took the oath of office on April 14 last and that his cabinet is composed of the following members: General Julian Zorilla, secre-

tary of interior: Licentiate Ramon O. Lovaton, secretary of foreign affairs; Licentiate Mario A. Savinon, secretary of finance and commerce; General Tadeo Alvarez, secretary of war and navy; Licentiate Apolinar Tejera, secretary of justice and public instruction; Sr. Enrique Montes de Oca, secretary of agriculture and immigration; and Sr. Ricardo Limardo, secretary of public works. — In the interesting MESSAGE which President Adolfo Nouel submitted to the National Congress on February 1, 1913, the exports of the Dominican Republic for 1912 are given as \$12,180,478.91, as compared with \$11,023,058.02 in 1911, or a difference in favor of 1912 of \$1,157,420.89. The imports for 1912 were \$8,910,000.12, as compared with \$7,126,877.13 in 1911, or a difference in favor of 1912 of \$1,783,122.99. The total export, import, and port duties in 1912 aggregated \$3,778,605.58, as compared with \$3,501,772.19 in 1911, or a difference in favor of 1912 of \$276,833.39. The law of December 14, 1912, authorized the Executive to contract a loan up to \$1,500,000 at an interest rate not exceeding 7 per cent per annum. This loan has been made and the proceeds applied to back payments and other expenses authorized by Congress. The Western Highway has been constructed to within a few kilometers of San Cristobal, to which point it will probably be completed about the middle of the present year. The preliminary studies have been terminated for the construction of a railway from Barahona to Enriquillo, via Neyba and within a few kilometers of the lake of the latter name. The construction of a railway to connect the capital with the northern part of the Republic is awaiting the adoption of a route different from that at first selected. The department of fomento and communications is negotiating for the construction of a railway from Bahía de Manzanillo to the city of La Vega following along the left-hand side of the Yaque River to within a short distance of the city of Santiago. The Barahona and Enriquillo railways are to be built with the assistance of the State. — An executive decree of February 6, 1913, published in the Official Gazette of February 22 last, specifies the form and colors of the COAT OF ARMS and of the national flag of the Republic as follows: Three months after the publication of this decree in the Official Gazette the coat of arms of the Republic shall have the form of a right-angled parallelogram (*cuadrilongo*), with two small salient angles in the upper part, its lower angles rounded terminating in a point at the base and arranged so that if a horizontal line be drawn uniting the two verticals of the right-angled parallelogram from where the lower angles begin a perfect square is formed. The colors of the coat of arms as well as of the national flag shall be an ultramarine blue and a vermilion red in addition to the white of the cross. When the coat of arms can not bear the national colors, it shall have the horizontal and vertical lines established by heraldry. The design

at the bottom, which the great seal of the nation reproduces, shall serve as a model for the coat of arms.—The city council of San Francisco de Macoris has recently received bids for the construction out of cement and bricks of a PUBLIC MARKET, and for the building of a cement gallery in the cemetery of the city. Engineer H. B. Howland has been appointed to superintend the awarding of the bids and the execution of the work. —A party of American capitalists, among whom were L. H. Shearman, R. L. Farnham, Charles B. McDonald, and H. R. Grieser, recently made an extensive horseback trip of 30 days' duration with the object of investigating the resources of the country. Some of the places visited were Dajabon, Guayubin, Puerto Plata, Santiago, La Vega, Moca, Salcedo, Santa Fe de Macoris, and Sanchez.—The city council of Santo Domingo has arranged with the electric light company of that place to extend the ELECTRIC LIGHT and power service so as to enable the city to supply the outlying districts of San Carlos and Avenida Capotillo with light and power. The extension will cost the city about \$2,000, but will enable it to provide light and power for the entire municipality with the exception of Villa Duarte.—The city of Santiago de los Caballeros will soon be supplied with ELECTRIC LIGHT AND POWER. In February last an \$18,000 contract was made for the purchase of 2,100 telegraph posts of good quality for the purpose of stringing the electric wires. These posts have been delivered and are being put in position so that in a very short time the city of Santiago will have an electric light and power service. The electric light company will also establish an office at Las Lagunas.—The Diario of Santiago de los Caballeros states that Congress has appropriated half a million dollars during the present year for the continuation of public works now in progress in the country.—A WIRELESS TELEGRAPH installation has been established at Santiago de los Caballeros under the temporary direction of an American expert.—According to press reports the ELECTRIC LIGHT and power plant at Puerto Plata was inaugurated in April last.



ECUADOR

An organization of natives and foreigners has been formed in the city of Guayaquil for the BEAUTIFICATION of that important commercial center, and also for the purpose of celebrating in due form the centenary of the 9th of October, 1820, the date on which the people of Guayaquil took up the cry of liberty and by their example and valor encouraged the rest of the Republic in throwing off the Spanish yoke. The objects of the organization in the beautification

of the commercial metropolis of Ecuador are patriotic ones in which both native and foreigner can cooperate to the fullest extent.—The FAUNA AND FLORA of Silver Island, off the coast of Ecuador near Manta, are being investigated by Mr. William B. Richardson, a North American scientist representing the American Museum of Natural History of New York, who hopes to obtain some rare and perhaps even unknown species of birds and mammals for the museum. In Rio de Oro, one of the places already visited by Mr. Richardson, over 700 specimens were obtained. After spending some time on Silver Island Mr. Richardson proposes to carry on investigations in the province of Loja.—An executive decree of January 29, 1913, modifies the decree of October 31, 1911, so as to incorporate the Gualaquiza, Zamora, and Rosario parishes in the Province of Azuay instead of the Oriental Territory. The parishes referred to are now in the canton of Gualaquiza, whose capital is Sigüig.—The METROPOLITAN CLUB of Guayaquil has elected the following officers for 1913: Lautaro Aspiazu, president; Alejandro Tola, vice president; Dario R. Astudillo, secretary; Guillermo Higgins Garbó, treasurer, and Arcesio Manrique, librarian.—A new WEEKLY NEWSPAPER has been established at Ambato under the name of "El Trabajo" (The Work). The publication is nonpolitical.—The municipal council of the Federal capital has established FREE MEDICAL SERVICES for indigent persons in the city of Quito. For this purpose the city will be divided into three sections and a municipal physician assigned to each one of these divisions.—The principal countries which purchase Ecuadorean toquilla STRAW HATS are Germany, West Indies, Argentina, Belgium, Brazil, Costa Rica, Chile, Spain, United States, France, the Guianas, England, Mexico, Nicaragua, Panama, Salvador, British Columbia, and Venezuela. The weaving of toquilla straw hats has been a prosperous industry in Ecuador since 1865, and of late years the demand for these hats has increased by leaps and bounds. At one time a school was maintained in Guayaquil by the Government for the purpose of teaching the weaving of such hats to women and girls. Many persons attended this school and a large number became proficient in the art. The school has been discontinued but its good effects are still noticeable, inasmuch as many persons skilled in the art became obligated to impart their knowledge to others. A considerable business is still done in the exportation of toquilla straw, but the exports of this article have shown quite a decrease in the last few years. This indicates that more of the straw is being manufactured in the country into hats. For instance, in 1910 the exports of toquilla straw from Ecuador were 72,509 kilos as compared with 52,570 kilos in 1911. Some of this straw goes into Peru over the land route leading to Loja and is worked up into hats in that country. A bale of toquilla straw weighs 100 kilos and is subject to an export tax of 1 sucre per kilo.—

One of the sections of the Pacific coast region of Ecuador most suitable to the cultivation of BANANAS is that traversed by the first 80 kilometers of the French railway in construction from Bahia de Caraquez to Quito. This part of the railway runs through a section of agricultural country exceedingly fertile and particularly adapted to the cultivation of bananas and other tropical products. Experts have estimated that the land and climate of the part of Ecuador referred to are as well adapted to banana culture as are the rich lands of Costa Rica and the Santa Marta region of Colombia.

GUATEMALA

Sr. Manuel Estrada Cabrera, President of the Republic of Guatemala, delivered an interesting MESSAGE to the national congress on March 1 last, in which he reviewed the principal events occurring in the country in 1912. The Executive states that the municipal revenues in 1912 amounted to 5,318,146 pesos, of which 4,805,398 pesos were spent in municipal works and government. During the year an expenditure of 211,125 pesos was made by the Federal Government in the public health service of the country. The Government hospitals contained during the period referred to 18,473 patients. During 1912 these hospitals had revenues amounting to 3,698,463 pesos, of which 3,655,199 pesos were expended in the maintenance of the service. During 1912 there were 5,340 marriages, 73,797 births, and 43,335 deaths in the republic, showing a natural increase in the population of 30,442. The records of real property show that during 1912 the transfers recorded amounted to 20,857,999 pesos, the mortgages placed to 99,183,842 pesos, and the mortgages canceled to 60,902,834 pesos, or a total business of 180,944,675 pesos, equal to \$10,055,260. The message states that the production of corn in 1912 was 3,016,713 quintals, valued at 60,334,260 pesos; of beans, 133,323 quintals, valued at 3,999,690 pesos; of wheat, 238,864 quintals, valued at 9,554,560 pesos; of rice, 36,065 quintals, valued at 1,803,250 pesos; and of other products, such as fruits, vegetables, potatoes, sugar, meats, milk, cheese, etc., quantities valued at 229,859,304 pesos; or a total production of 305,551,564 pesos, equal to \$16,975,059. The exports in 1912 consisted of coffee valued at 197,793,108 pesos; sugar, 10,161,576 pesos; rubber, 2,533,824 pesos; woods, 4,346,496 pesos; and bananas, 12,000,438 pesos; or a total of 226,835,442 pesos, equal to \$12,601,969. The imports of rice, potatoes, and corn amounted to 13,164,732 pesos, equal to \$731,374. This gives a balance of agricultural exports over agricultural imports of

\$11,870,595 in 1912. Adding to this balance the agricultural products consumed in the country, \$16,975,059, it will be seen that the agricultural production of Guatemala in 1912 amounted to \$28,845,654. The mining industry is carried on in many of the departments on the slopes of the Andean cordillera. In Las Minas mountains gold, silver, copper, lead, and zinc are found. The mining code of Guatemala is very favorable to the development of the mining industry and transportation facilities are good. The telegraph system consists of 6,088 kilometers and the telephone system of 790 kilometers. In 1912 the post-office department handled 23,405,219 pieces of mail matter. The total revenues of the Republic in 1912 amounted to 71,014,726 pesos, as compared with 62,047,475 pesos in 1911. The expenditures in 1912 aggregated 76,682,916 pesos, disbursed as follows: Different branches of the administrative service 44,970,482, and public credit 31,712,434 pesos. In 1912 the public schools of the Republic numbered 1,835. — Among the numerous articles which the Government of Guatemala will send to the Agricultural EXPOSITION OF GHENT, Belgium, are samples of coffee, cacao, flour, sugar, wheat, chocolate, woods, textile fibers, and ores. — The President of the Republic has approved the LOAN of 80,000 pesos made by the Occidental Bank to the municipality of Quezaltenango for the purpose of buying the house adjoining the municipal palace. This loan is to be paid from the proceeds of a tax of 2 pesos per tercio (load) of brown sugar (panela) introduced into the municipality. Enrique Frese has requested the department of fomento of the Government of Guatemala to permit the free importation, for a period of five years, of 1,000 kilos monthly of sumac and crude tannin extracts, and 400 kilos monthly of oil — all for tanning purposes, to be used in the TANNING FACTORY at Carcha, Department of Alta Verapaz. — Work has been commenced on the SANTA RITA AQUEDUCT at Quezaltenango. This aqueduct is to be extended to the springs which supply the water for the use of the city of Quezaltenango, thereby insuring an abundant and uncontaminated water supply. It is expected that the work will be completed by the end of the present year. Sr. Maximiliano Cifuentes M., chief of the consular section of the department of foreign relations of the Government of Guatemala, has furnished the MONTHLY BULLETIN the following information: The Government of Guatemala decreed a period of five days of NATIONAL MOURNING throughout the Republic on account of the death of Dr. Manuel E. Araujo, President of the Republic of Salvador. — The Guatemalan DELEGATION TO WASHINGTON to congratulate President Wilson on taking possession of his office was composed of Sr. Lic. Antonio Batres Jauregui, and Sr. Joaquin Mendez, minister of Guatemala near the Government of the United States. — Sr. Giosue Notari has

been promoted by the King of Italy to the post of MINISTER OF ITALY in Central America with residence in the city of Guatemala. —The Government of Guatemala has appointed delegates to the following congresses: Sr. Juan Vandeputte to the Third International CONGRESS OF AGRICULTURISTS, and to the Tenth International CONGRESS OF DOMESTIC SCIENCE, to be held in Ghent during the World's Exposition in 1913; Sr. Julio Marsilly to the Fourth International CONGRESS OF SANITATION and House Hygiene to be held in Antwerp from August 31 to September 7, 1913, and Sr. Jose Maria Lardizabal to the International CONGRESS OF COMMERCIAL STATISTICS which was held in Brussels in March last. —Lic. F. Ernesto Sandoval has been recognized as CONSUL GENERAL of the Republic of Ecuador in Guatemala. —A tax of \$10 on each GUN or rifle, and \$8 on each REVOLVER imported into the Republic of Guatemala, with the exception of firearms imported by the Government for the army, has been levied for the benefit of the following ports through which they are imported: San Jose, Puerto Barrios, Izabal, Puerto Estrada Cabrera, and Panzos. Immigrants and tourists are subject to this tax, but are not required to pay same if they deposit their firearms in the customhouse at port of entry and obtain them on leaving the country, provided this is done before the expiration of one year from the time of making the deposit. After the expiration of one year the firearms are forfeited to the municipality. —An executive decree of the Government of Guatemala adopts the provisions contained in the rules and regulations proposed by Great Britain to avoid COLLISIONS AT SEA.

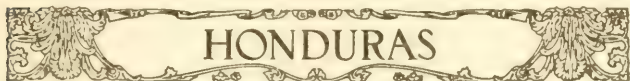
HAITI

On March 9, 1913, President Auguste signed the decree reorganizing the DEPARTMENT OF FOREIGN AFFAIRS. According to the new arrangement the following divisions or bureaus have been created: Diplomatic bureau, consular bureau, juridical bureau, ceremonial and precedence bureau, disbursing bureau, and bureau of archives. —The department of commerce has just put into effect for the purpose of helping commerce a temporary measure allowing the verification of perishable merchandise for approximative duties. The department, however, reminds importers that the treasury officials and customs collectors will not take into account in the approximative detailed statements the decreased duties provided for in the conventions of the Republic with France, Germany, and the United States if contrary to the exact terms of these conven-

tions; the requests for verification for approximative duties are not accompanied by certificates of origin. — The following cablegrams were exchanged between the Haitian and Venezuelan Governments upon the occasion of the official unveiling at Caracas on March 1, 1913, of the statue of Alexandre Pétion, a Haitian patriot, who played an important rôle in the struggle for Venezuelan Independence under Bolivar: "At the request of the President of the Republic I have the honor to inform your Excellency that we have to-day officially unveiled the statue of Pétion in affectionate remembrance of the Haitian Republic. (Signed) Andara, Minister of Foreign Affairs." In response to this message the secretary of state of Haiti cabled as follows: "Haitian Government and people much touched by proof of sympathy given the country by the unveiling of the statue of Petion. In their name I warmly thank the Venezuelan President and people and send best wishes for the development of the cordial relations existing between our two countries. (Signed) Léger, Minister of Foreign Affairs." During the centennial celebrations held in Venezuela in June and July, 1911, the Venezuelan Government decreed that a square in Caracas should be named after Pétion and his statue erected upon it in commemoration of the services he rendered Venezuela. — The *Moniteur Officiel* of March 12 publishes the text of the convention on the exchange of postal parcels without declaration of value concluded between Haiti and France and ratified by the Haitian legislative body August 27, 1912, and signed by the President of Haiti on March 6, 1913. The cost of a postal parcel weighing 5 kilograms (11 pounds) between France and Haiti is 2 francs (\$0.40). In the negotiations Haiti was represented by Mr. Léger, secretary of state, and Mr. Edmond Lépinasse, secretary of the treasury and commerce, and France was represented by Count d'Arlot de Saint-Saud, resident minister at Santo Domingo in charge of the legation at Port-au-Prince. — The first autobus of the Automobile Transportation Co. of Port-au-Prince was put into commission on March 20. The bus, which holds 16 passengers, runs through the principal streets of the capital. — The last rail on the branch line from Port-au-Prince to St. Marc was laid on the 6th of March by the National Railroad Co., which is now undertaking the final work looking to the completion of the line which, according to the department of public works, was to be opened to public traffic by the end of March. The completion of this new line brings the length of the railroad lines built by the company to 159 kilometers (98 miles), distributed as follows: Gonaïves-Ennery (open to traffic), 33 kilometers; Cap Grande Rivière (open to traffic), 23 kilometers; Port-au-Prince to St. Marc, 103 kilometers. The company is at present planning a line from Gonaïves to Gros Morne, which it intends

to undertake in the near future. —The secretary of agriculture recently addressed a report to the President, in which he states that he has been informed that the coffee and cacao trees are not giving their normal yield, in spite of the incontestable fertility of the soil, and that an epidemic has attacked the coffee trees of the county of Jacmel. The secretary informs the President that an agricultural expert has been sent to this region to make a report on the condition of the trees, which will be submitted shortly. In looking for the contributing causes to this condition the secretary finds, first, that the peasants, left to themselves without any instruction, do not farm according to scientific methods and consequently exercise less care for the development of their plantations, and, second, that plants, like creatures, are affected not only by the climate and seasons, but also suffer from diseases. An appropriation has been voted in the budget for the establishment of an agricultural school, and the department has negotiations under way to engage professors from abroad to give instruction in the latest scientific agricultural methods. The minister believes that in the meantime steps should be taken to protect these industries, and proposes the organization of a sort of traveling school of agriculture and that professors be sent from place to place in the coffee-producing regions to teach the producers how to improve their plantations and also how to prune the trees in order to free the branches from suckers which absorb all the sap which should go to form the fruit or berry. The secretary also proposes the establishment of experimental agricultural fields in the coffee and cacao producing regions to teach the farmers in the locality the rudiments of scientific farming. The President heartily approves the plans submitted by the secretary of agriculture to initiate the Haitian planters into scientific methods of cultivating cacao and coffee, the two principal products which form the basis of the wealth of the country. —A decree was signed by the mayor of Port-au-Prince and approved by the secretary of the interior, changing the name of Port or Pavée Street to Dantes Destouches Street in honor of the late Dr. Dantes Destouches, an eminent physician of Port-au-Prince. —The President of the Republic signed a decree on March 19, 1913, regulating the program of studies of the first and second year of primary instruction in the public schools of the city and country districts. The school hours are from 10 o'clock in the morning to noon and from 1 to 4 in the afternoon. Special attention is being given to the improvement and dissemination of education in Haiti. A bill was passed last July increasing the salaries of teachers and establishing a manual training school for boys at Port-au-Prince and an agricultural school in the Department of the West. —A board of hygiene has been organized in Port-au-Prince for the purpose of inspecting the milk sold in the city and visiting

the slaughterhouses, hospitals, cemeteries, factories, and all other public or private establishments when necessary, assisted by the justice of the peace. The director of the service of hygiene or any delegate approved by the mayor will make a monthly report to this official on the condition of these places. Those who do not conform to the requirements of the board of hygiene will be reported to the justice of the peace and punished according to the law in effect.



HONDURAS

El Nuevo Tiempo, an important daily newspaper published in Tegucigalpa, states that there exists in Honduras an immensely fertile and unpopulated region containing an area, approximately, of 16,900 square kilometers, known as the "MOSQUITIA HONDUREÑA", comprised between the Segovia River on the east, the Aguan River on the west, the Caribbean Sea on the north, and the Department of Olancho on the south. The zone referred to is exceedingly rich in natural wealth and contains numerous navigable streams which empty into the Caribbean Sea. Some of the lands of this territory are especially adapted to agriculture and stock raising, and it has been roughly estimated that the wooded section of the district contains 90 million pine trees, 45 million mahogany trees, and about 14 million other trees of different kinds. The approximate value of these trees as they stand in the forest is 25 cents each for the pine, \$5 each for the mahogany, and 5 cents each for the other trees, or a total value, in round numbers, of \$248,900,000. The mineral wealth of the region in question is very great, and it is well known that the natives who live along the shores of the Patuca River or any of the streams of this section can pan out enough gold in a day from the auriferous sands of these streams to enable them to live in comfort for a considerable time. Sarsaparilla, rubber, coconut groves, and wild banana plants are also found in great profusion in this region, the coconut groves and the banana plants reproducing themselves. In addition to this there is an abundance of fibrous plants everywhere, and excellent grazing for stock on the river plains. It has been estimated that in the region referred to grass is available for the maintenance of more than 200,000 head of cattle annually. The navigable rivers which cross the Honduran mesquite territory are the Aguan, the Tinto, the Segovia, and the Patuca. The climate of this part of Honduras varies from quite hot at the coast to temperate and pleasant in the interior, a gradual slope, speaking generally, occurring from the seacoast, inland.—The pro-

posed MILITARY LAW of the Republic of Honduras makes military service obligatory on all Honduran male citizens of sound health, unless otherwise exempted, between the ages of 20 and 40 years. The army is divided by this law into active and reserve troops, the active troops consisting of soldiers from 20 to 30 years of age, and the reserve troops over 30 and up to 41 years of age.—A subvention of 100 pesos per month has been granted to the HOTEL which Mrs. Luisa B. de Meza has established at Comayagua, under the condition that said hotel is to give preference to the lodging of Government officers and diplomatic agents in transit through Comayagua and bearing the recommendation of the proper officials of the Government.—Sr. Don Alberto Menibrebño, minister of the Republic of Honduras in Washington, has advised the MONTHLY BULLETIN that, in accordance with a decree of February 28 last, the Congress of Honduras has approved the contract made with Mr. Rene Keilhauer for the construction of the section of the PAN AMERICAN RAILWAY corresponding to Honduras. This section of railway will cross the Departments of Choluteca and Valle, and connect the line with the section of the railway to be built by the Republics of Salvador and Nicaragua.—The Gaceta Oficial of Tegucigalpa publishes some interesting STATISTICS in which the population of Honduras on December 31, 1911, is estimated at 566,017 souls, as compared with 553,446 on the same date of 1910, or an increase in 1911 of 12,571 inhabitants. The births in 1911 numbered 21,825 as compared with 20,447 in 1910, or a gain in 1911 over 1910 of 1,378. The deaths in the Republic in 1911 were 10,620 as compared with 10,135 in 1910. The marriages in 1911 numbered 2,114 as compared with 1,987 in 1910, or an increase in 1911 as compared with 1910 of 127. The number of electors in the Republic in 1911 was 107,850. In 1911, 771 steamships and 2,444 sailing vessels entered the ports of Honduras, and 705 steamers and 2,412 sailing vessels cleared from said ports. The number of passengers entering the ports of the country in 1911 was 8,245, and the number of those leaving was 6,140. In 1911 there were killed in the slaughter houses of the Republic 47,777 head of cattle, 30,857 hogs, and 68 sheep. The municipal receipts for the year 1911 amounted to 1,271,553 pesos, and the municipal expenditures to 869,937.



According to the Mexican Herald a bill is to be introduced into the Mexican Congress authorizing the entire reorganization of the department of fomento. A new department, to be named the

DEPARTMENT OF AGRICULTURE AND COLONIZATION, is to be formed while the former department of fomento is to be called the department of trade and industry. —From the same publication it is learned that well No. 5 of the *Compania Mexicana de Combustible*, in the Topila district of Tamaulipas came in some days ago and has since been capped. The estimated flow is 50,000 BARRELS OF OIL A DAY. Oil was struck between the depths of 2,200 and 2,500 feet. Preparation is now being made for the provision of tankage and transportation. The oil will likely be transported in barges to Tampico for refining and sale. —For the purpose of importing Mexican BEEF CATTLE AND BANANAS from the southern part of the Republic to the United States the Gulf Coast Fruit & Steamship Co. has been organized, with offices in Galveston, Texas. The new company will operate exclusively in connection with the Associated Tropical Plantation Co. and the Gulf Coast Plantation Co. These two companies own and operate the Filisola and La Tabasqueña plantations in the State of Veracruz, said to be among the best in the Republic for the production of bananas. They are reached by the Coatzacoalcos and Uspanapa Rivers, which have sufficient depth for steamers of ocean-going draft to run direct to the wharves and load cargo. The new company has recently completed about 15 miles of railway connecting the various parts of the plantations, supplied with suitable cars and oil-burning locomotives. The Norwegian steamship *Alabama* has been chartered and will ply between Galveston and Puerto Mexico, making the trip in about 72 hours, with cargoes of bananas and cattle, about twice a month. The company expects to charter another steamer within a short time, and a weekly service will then be established. —AN EQUESTRIAN STATUE to the memory of Jose Maria Morelos Pavon will be unveiled on May 1 at Morelia, capital of the State of Michoacan. The date chosen is the centenary of the taking of Cuautla by the troops under the leadership of this general. The unveiling ceremony will be performed by the governor of the State, and the civil and military authorities and numbers of invited guests from other parts of the Republic will attend. —The death of Lie. Rafael de Alba, a NOTED MEXICAN POET, occurred on April 6. During his lifetime Lie. de Alba for many years was secretary to the government of Tepic, but had lately taken up his residence in the City of Mexico. —The director general of lighthouses has decided to establish a branch of the department at Ensenada, Territory of Lower California, to supervise and care for the LIGHTHOUSE and the different maritime signals to be erected for the safety of navigators in the waters about Punta Ensenada and the Island of Todos Santos. —The planting of 6,000 TREES on the road from Mexico to Pachuca has been completed. The work was undertaken

under the supervision of the inspector of roads of the department of communications.—At the anniversary commemoration in Puebla on April 2 the **NEW CITY MARKET** was opened. It had been in course of construction for three years and cost \$500,000.—The director general of agriculture has completed the distribution of 313,000 **FRUIT TREES** imported from the United States, Europe, and Japan to the 435 applicants. The trees imported from the United States and France comprised chiefly apples, peaches, apricots, pears, plums, and olives. Seedless oranges and plums are among those imported from Japan.—The Mexico Tramways Co. has completed the double-tracking of the section on **TILALPAM ROAD** between hacienda de San Antonio Coapa and Huipulco. Construction of the new lines between Mexico City and Toluca, and also to Puebla, is progressing. —The department of telegraphs of Mexico City has commissioned Ing. Benigo Guerrero to proceed to Sonora to inspect, and, if satisfactory, take over the **NEWLY CONSTRUCTED LIGHTHOUSE** on the isla de Pajaros, close to the port of Guaymas.—Work is again to be started in constructing the railway to connect the capital of the State of Oaxaca with the Tehuantepec-Salina Cruz line. Tlacolula is the point where construction is to be resumed.—According to a report of United States Consul C. A. Miller, at Tampico, shipments of **CRUDE PETROLEUM** from that district steadily increase. During the last quarter of 1912 declared exports to the United States of crude oil amounted to 1,568,169 barrels and through the Tuxpam consular agency 1,337,182 barrels. In addition the Waters-Pierce refinery has been taking about 6,000 barrels and the railway company about 12,000 barrels daily. A conservative estimate of crude oil shipped from and consumed in the district during the December quarter is placed by the consul at 5,000,000 barrels.

NICARAGUA

The American of Bluefields states that the córdobas, the new **COINS** for Nicaragua, were placed in circulation on the Atlantic coast the latter part of March last by the National Bank of Nicaragua. These coins circulate freely and are received everywhere at par. The people of the Atlantic coast district of the Republic have long been accustomed to the use of coins of Central and South America, the value of which was regulated by the bullion value of the silver contents, and while fluctuating to some extent was a fairly stable currency. The establishment of a nonfluctuating currency for

Nicaragua by the loan bankers formed a part of the loan contract entered into by the Nicaraguan Government and the New York bankers. At Managua, the capital of the Republic, a ruling was made during the latter part of March to charge a commission of $1\frac{1}{2}$ per cent for exchanging 5,000 córdobas or over for dollars, and 1 per cent commission for exchanges of 100 córdobas to 5,000 córdobas. Bank bills representing córdobas have been placed in circulation in different parts of the country. — The LIGHTHOUSE TAX at Pearl Lagoon, which was formerly collected from steamers entering Bluefields, has, under an order of the department of fomento, been discontinued. The lighthouse which caused the collection of this tax was erected and is maintained by the Atlantic Fruit Co. and taxes derived from same according to the ruling of the department can not be considered as port charges. — The *Diario de Nicaragua* (daily of Nicaragua), the publication of which was discontinued some time ago, is again being issued in Managua under the direction of Sr. Juan Bantista Prado. The publication is nonpolitical. — The Pan American FRUIT AND FIBER Co. at Rio Grande, Nicaragua, is under the management of Claude D. Bingham. The company is engaged in the development of the fruit and fiber industries of the Atlantic coast region and is employing the latest approved methods in fruit culture and fiber extraction. — Since the first of the present year the ATLANTIC FRUIT CO., with general offices at 11 Broadway, New York, has established for its Nicaraguan division sailings from Pearl Lagoon for New York via Port Limon, Colon, Jamaica, and Cuba, every alternate Sunday. — The Nicaraguan Commercial and Logging Co. at Bluefields operates GASOLINE VESSELS between Bluefields and points on the Atlantic coast and on the Prinzapulea River, with a special fast steamer service to the Ocongvas, Pis Pis, Bana Cruz, and Suina mining districts. — According to the press of Nicaragua the General Syndicate of American Research of Paris, operating in the Republic of Nicaragua, has for its object the study of industrial, agricultural, mining, and timber prospects susceptible of development. The syndicate proposes to centralize propositions of this nature in order to bring them to the attention of French capitalists through separate reports and estimates that would be obtained through exploitation. The company offers its services in conducting negotiations for the purpose, sale, or location of lands, the establishment of agriculture centers, and the development of mining properties. Attention will also be given to the making of plans, technical and financial reports, and railway projects and surveys when backed by European capitalists, and to contract for and finance loans in Europe. — On March 6 last the National Assembly of Nicaragua approved the resolution authorizing the President of the Republic to make a LOAN of \$1,000,000. — A

thorough investigation has been made and a report will be prepared by A. Van Scrivner, a civil engineer and dredging expert, as to the feasibility of DREDGING the flats and bar at Pearl Lagoon. This report is to be submitted to capitalists who will make it a basis for considering the undertaking of the dredging project referred to.—The new TARIFF of Nicaragua became effective on March 24, 1913.



PANAMA

The National Assembly of Panama has authorized the President of the Republic to make the necessary studies to determine the number of miles of RAILWAY which it would be beneficial to construct in the Republic and the routes of the same, bearing in mind the resources the country has at its command and the best advantages to be obtained from the investment of public funds used for this purpose. In order to intelligently arrive at the facts connected with the railway construction referred to, the President is empowered to appoint a committee of engineers to investigate and report upon the railways and branches that may be considered to be to the interest of the Government to build. The President is further authorized to negotiate a loan for the amount required to carry on said railway construction. This loan shall not bear interest exceeding 6 per cent annually, and the amortization of the same within a period of 50 years is to be arranged upon the best possible terms, the President being authorized to pledge the revenues of the nation, if necessary, in guaranteeing the capital and interest on the money invested. The Executive is empowered to build the railways referred to administratively or through contractors as he may deem best for the interests of the State.—A law has been enacted by the National Assembly of Panama granting a BOUNTY of 2 balboas for each quintal of toquilla straw exported in the form of manufactured articles, such, for example, as Panama hats. The President of the Republic is authorized to regulate the operation of the law, increasing or diminishing the bounty in such a way as he may deem best to encourage the development of the toquilla straw industry in the country. When the President considers that the industry has been sufficiently stimulated and is able to care for itself, he is empowered to abolish the bounty.—The BOUNDARY of the district of Arraijan has been fixed by law as follows: The line of the Canal Zone from its starting point at Venado beach to its intersection with the Lirio River, and up that stream to its source; thence in a straight line to the summit of the Ahoga-Yeguas hill; thence in a straight line to the head of the

Naranjal Canyon and down said canyon to the Caimito River and down that river to where it enters the sea, and from thence along the shore to the Canal Zone at Venado beach.—President Porras has been authorized by Congress to arrange with a domestic or foreign company, under the proper guaranties, for the establishment of a **BANK OF ISSUE**, exchange, and discount, with a mortgage department annexed. The institution will be called the "Bank of Panama," is to have a capital of 1,000,000 balboas, and is prohibited from beginning business until 50 per cent of the capital is paid in. The bank is authorized to issue bank notes payable to bearer, and will be required to publish each month in the *Gaceta Oficial* a statement of its assets and liabilities. The President is empowered to make a contract for a term of 40 years, during which period the Government agrees not to issue bank notes payable to bearer.—A recent message of the President of the Republic to the National Assembly recommends that the Government of Panama be given the right to intervene in the **CONSERVATION OF NATURAL RESOURCES** of the Republic, among which are mentioned forests on Government and unappropriated lands, vegetable ivory, rubber, liquid amber, balsam, chicle, medicinal products, animals, foodstuffs, live stock, mines, water courses, petroleum deposits, etc. One of the clauses of the proposed law provides that no contract made in regard to natural resources shall extend over a period of 40 years, and that the exploitation of natural resources shall be made under the supervision of the State.—The National Assembly of the Republic of Panama, in accordance with the recommendation of President Porras, has increased the appropriation for the celebration of the **FOURTH CENTENARY** of the discovery of the Pacific by Vasco Nunez de Balboa from 30,000 to 150,000 balboas. The exposition grounds will be near the site of the old city of Panama. The inauguration will take place on January 21, 1914, and the exposition will remain open until May 31 of the same year.



PARAGUAY

El Diario of Asuncion states that construction work will soon begin on the large **IRON BRIDGE** between Concordia, Argentine Republic, and El Salto, Uruguay, thereby opening up an all-rail route, via the Northeastern Uruguay, and the Northwestern Argentine Railways, between Asuncion and Montevideo. To make up this route a number of railways are made use of, among which are the Paraguayan Railway from Asuncion to Encarnacion, and the Argentine

and Uruguayan Railways from Encarnacion to Concordia and Montevideo. This railway route, with its connections places four countries in direct rail communication with each other, namely, Paraguay, Argentina, Uruguay, and Brazil. —Sr. Enrique Astengo of Asuncion has sold 170 leagues of LAND in the Paraguayan Chaco, about half of which is located opposite the federal capital, to the Farquhar syndicate. The land sold is covered with different kinds of valuable timber. It is said that the Farquhar syndicate proposes to construct a railway through these lands and to build a port opposite or in the neighborhood of Asuncion, as well as to erect saw mills and tanning factories at convenient points on the land in question. Preliminary negotiations have been made between the Belgian minister and the Government of Paraguay for the drawing up of an EXTRADITION TREATY between the two countries. —An agricultural census recently taken at Colonia Elisa shows that the principal crops cultivated in that colony are tobacco, maize, mandioca, alfalfa, Irish and sweet potatoes, pineapples, oranges, mandarins, and bananas. The mandarins, bananas, and pineapples are principally exported to Rosario and Buenos Aires, but of late a growing demand for these products has been noted in Asuncion, and it is predicted that at no distant date a large domestic trade will be built up with the capital of the Republic. —The PACKING HOUSE (saladero) at Villa Concepcion commenced operations during the latter part of last February with a stock of cattle on hand and contracted for estimated at 10,000 head. —Statistics published in the Diario of Asuncion show that in 1910 Paraguay produced 13,000,000 pounds of TOBACCO, as compared with 75,285,000 pounds grown in Brazil, and 31,000,000 pounds harvested in Argentina during the same year. —The press of Paraguay states that Dr. Héctor Velázquez, minister of Paraguay in Washington, has been commissioned to arrange for the participation of the Paraguayan Government in the Panama-Pacific, and the Panama-California EXPOSITIONS, which will be held in San Francisco, and San Diego, Cal., respectively, in 1915. A recent executive decree required the registration of all Paraguayan citizens between the ages of 17 and 45, who are subject to military duty, in accordance with the law making MILITARY SERVICE compulsory in the Republic. —A large RAILWAY BRIDGE over the Parana River between Encarnacion and Posadas has been planned by the railway company to take the place of the railway ferryboat traffic now in operation between the two points. —According to notices of the Paraguayan press preliminary steps have been taken by the federal Government looking to the CODIFICATION of the laws of the country. The work is in charge of a commission of jurists appointed by the minister of justice. —The Revista del Paraguay is the title

of a new publication established at Asuncion by Sr. Ramon Lara Castro and Dr. Vitriato Diaz-Perez, devoted to history, science, art and biography. The publication will be issued every two months and is the only magazine of this character at present published in Paraguay. It is estimated that there are 60,000 valuable documents unedited in the national archives of the republic, many of which will be treated of in the Revista referred to. — Dr. Héctor Velázquez, minister of Paraguay in Washington, has kindly furnished the MONTHLY BULLETIN with the following data: The SUPREME COURT has been definitely organized by the appointment of doctors Manuel Burgos, Félix Paiva, and Gaspar Villamayor to the bench. The office of JUSTICE, WORSHIP, and PUBLIC INSTRUCTION, made vacant by the appointment of Dr. Félix Paiva to the supreme court, has been filled temporarily by Dr. Eusebio Ayala of the department of foreign relations. — Dr. Luis Alberto Haedo has been appointed secretary of the LEGATION of Paraguay in Montevideo, and Dr. Moises S. Bertoni delegate to the Congress of AGRICULTURAL DEFENSE held in Montevideo in April last. — IMMIGRATION to Paraguay is increasing and many requests for lands are being made for colonization purposes. — Dr. Fulgencio R. Moreno has been appointed envoy extraordinary and MINISTER plenipotentiary of the Republic of Paraguay near the Governments of Chile and Peru. — Dr. Apolinario Real, ex-member of the supreme court, has been appointed attorney general of the Republic. The Government of Paraguay has decided to participate in the ADRIATIC EXPOSITION to be held in Vienna during the middle of the present year, and has appointed the consul of Paraguay in Vienna, Sr. Leo Hirsch, to represent it officially. — Paraguay will be represented by Sr. Arnaldo Schoch, chargé d'affaires of Paraguay in Paris, at the INTERNATIONAL CUSTOMS STATISTICS CONGRESS to be held in Paris. Count Jorge de Monceau de Bergendal will represent the Republic of Paraguay in the conference for making more uniform COMMERCIAL STATISTICS, which is to be held in the city of Brussels. — Dr. Cecilio Baez was chairman of the fifth committee of the International CONGRESS OF JURISTS which met in Montevideo recently. — During a recent session of the Congress of Paraguay a HOMESTEAD BILL was introduced, the main features of which are as follows: The Government is authorized to give, free of charge, to citizens of the Republic who are not owners of lands, and to foreigners declaring themselves immigrants and willing to accept the conditions of the grant, an area of land in no case to exceed 45 acres on the condition that they will establish a homestead thereon. The grant further provides that the land can not be sold, mortgaged, or transferred, except in case of inheritance, that it can not be held for debt contracted by the grantee either

before or subsequent to his ownership; where owned by man and wife, in case of divorce the land becomes the sole property of the one to whom the custody of the children is given by the court; in case of death of the man or wife the property shall pass to the survivor regardless of the children; in case of death of both parents, the oldest son inherits, provided he has been declared the heir by a public document, otherwise the estate shall be divided according to the common law, being sold for division. Persons acquiring such homestead shall within two years of possession build a house and cultivate the land, the extent of such improvements to be determined by the executive power in each case. Applications for such homesteads are to be made to the minister for foreign affairs and not more than one lot may be granted to any one person. The bill further provides for the purchase of fiscal lands in addition to those already owned, but limits expropriation of lands for this purpose to four square leagues. Should the bill become a law it will doubtless stimulate immigration to Paraguay very materially and greatly encourage farming on a small scale.



The Government of Peru has contracted with the Bank of Peru and London of Lima, with branches at Callao, Iquitos, Piura, Chiclayo, Pacasmayo, Trujillo, Huaras, Huacho, Cerro de Pasco, Huanayo, Chincha Alta, Ica, Mollendo, and Arequipa, to form a corporation under the name of RECAUDADORA de IMPUESTOS (Collector of the Revenues) with a capital of £1,500,000, to collect for a period not to exceed four years the FISCAL REVENUES formerly paid to the Compania Nacional de Recaudacion (National Collection Company) on alcohol, sugar, matches, revenue stamps, and registration fees, chattels, sealed paper, licenses at Lima and Callao, transfer fees, paper used in imposing fines, port dues, opium, tobacco, and denatured alcohol. River and port dues and wharfage charges are not to be collected by the company. The company agrees to loan the Government up to £1,245,000, secured by 7 per cent interest-bearing treasury bonds payable to bearer. The company is to receive for its services a commission of 1 per cent on the amount collected after deducting working expenses. The company is also authorized to contract with the departmental and municipal boards and public institutions for the collection of their revenues. The management of the company shall be entrusted to a board of nine directors, six of whom shall be selected by the shareholders and three by the Government,

one of the latter number to be managing director and at least two of the directors to be native-born Peruvians. The company is exempted from the payment of all fiscal, departmental, and registration charges. — The **BANK OF PERU AND LONDON**, the main office of which is at Lima, Peru, has a paid-up capital of £500,000 and a reserve fund of £300,000. The balance sheet of this bank on December 31, 1912, showed the following liabilities and assets: Liabilities—Capital and reserve fund, £800,000; unpaid dividends, £1,221; rediscounts, £14,191; profit and loss, £61,558; and current accounts, time deposits, bills payable, etc., £4,611,399, making a total of £5,491,369. The assets consisted of cash, £645,077; bonds, loans, and discounted bills, £2,136,451, and other assets, £2,709,841.

The **PERUVIAN GEOGRAPHIC CONGRESS**, with headquarters in Lima, Peru, has adopted resolutions recommending the encouraging of the teaching of geography in the country, the establishment of chairs of geography in the universities of Peru, an improvement of the plan of teaching geography in the Republic, the selection by competitive contest of a geography of Peru, the preparing of popular geographic maps, and the encouragement of the study of geography among adults in Peru. — The **National AGRICULTURAL AND VETERINARY SCHOOL** at Santa Beatriz, Peru, was established for the purpose of giving practical and scientific instruction in agriculture and veterinary surgery to young Peruvians interested in these studies and in order to supply the constantly increasing demand for agricultural foremen and veterinary experts. To be admitted to the school the candidate must have the prescribed educational qualifications, be between 16 and 20 years of age, physically sound, and obtain a scholarship by competitive examination from the department in which he resides. The school opened its course for the present school year in April last with the largest number of students ever admitted to its classes. The complete course covers a period of five years. A certain number of students having the requisite qualifications are admitted to the school without the presentation of a scholarship upon the payment of £6 annually, plus laboratory fees. — A new **WIRELESS TELEGRAPH** tower, the "Eucanto," has been erected and put into service in the Putumayo region. — The Department of Ayacucho has been authorized by the Peruvian Congress to contract for the construction of a bridge over the Pampas River. — The official newspapers of Peru of January 24 and 31 and February 8 last contain presidential decrees regulating strikes and strikers, certain obligations being imposed upon the employer and the employee for the purpose of protecting the public. — The **MILITARY SCHOOL** of Peru has been reorganized so as to admit each year into the school for drill and instruction a battalion of infantry, a regiment of cavalry, and a section of light artillery.

SALVADOR

Through the courtesy of Sr. Federico Mejía, minister of the Republic of Salvador near the Government of the United States in Washington, the MONTHLY BULLETIN is advised that Sr. Carlos Melendez succeeded to the PRESIDENCY of the Republic on the death of the late President, Dr. Manuel E. Araujo, and that Dr. Teodosio Carranza became first designate, Col. José María Peralta Lagos, second designate, and Sr. Samuel Luna, third designate. The cabinet of President Melendez, appointed under a decree of March 26 last, and installed into office on the next day, is as follows: Dr. Francisco Martínez Suarez, secretary of foreign relations, public instruction, and justice; Sr. Samuel Luna, secretary of the interior, public works, and charities; Dr. Ramón García González, secretary of finance, public credit, and agriculture; and Col. José María Peralta L., secretary of war and marine.—The National Assembly has elected Dr. Manuel Castro Ramírez justice of the Republic of Salvador in the CENTRAL AMERICAN COURT OF JUSTICE, and Dr. Víctor Jerez CHIEF JUSTICE of the supreme court of Salvador for the term 1913-1915.—The following appointments, according to advices received from Sr. José Alfaro Moran, consul of Salvador in New York, have recently been made in the diplomatic and consular service of the Republic of Salvador: Dr. Enrique Borja, minister in Guatemala; Dr. Carlos A. Meza, secretary of the legation in Washington; and Dr. Rafael V. Castro, consul general at Hamburg.—The WELLS FARGO EXPRESS CO. has arranged with the Salvador Railway Co. to establish the express business between Salvador and the United States, and the connections of the express company with the rest of the world.—The new ORPHAN ASYLUM in the city of San Salvador will have a capacity for 700 children. The property has large grounds and is valued at 40,000 pesos. Plans have been made for the erection of cement and stone buildings. On the forenoon of February 4 of the current year, the day of the assassination of the President of the Republic of Salvador, the MESSAGE which he intended to present to Congress was revised and signed by him. In this message the late President, Dr. Manuel E. Araujo, reviews the principal events occurring under his administration during the previous year. In 1912 the receipts of the hospital fund were 1,317,479 pesos and the expenditures 1,293,557, leaving an excess of receipts over expenditures of 23,922 pesos, which, added to the balance brought over from 1911, made the cash on hand in this fund at the beginning of 1913 amount to 88,866 pesos. During the year 1912 special attention was given to the

encouragement of education. The Federal Government invested during that year 33,050 pesos in buildings and grounds for public schools. From March, 1911, to December 31, 1912, primary schools to the number of 86 were established in the Republic. Higher education also received the careful attention of the Government, the State having supported during the past year 16 colleges and awarded a large number of scholarships. The total revenues of the Republic in 1912 amounted to 14,445,731 pesos as compared with 12,350,874 pesos in 1911. Of the receipts in 1912 the sum of 8,324,869 pesos represented import duties and 1,400,894 export duties. The public debt, which, on March 1, 1911, amounted to 33,500,000 pesos, was reduced at various times, so that on December 31, 1912, it amounted to 27,894,336 pesos. —In 1912 the following sums were collected by the principal CONSULATES of the Republic of Salvador: San Francisco, \$4,798; New York, \$4,287; Hamburg, \$3,243; London, \$2,721; Paris, \$2,774; Liverpool, \$2,316; and Genoa, \$1,529. —The value of the furniture and equipment of the PUBLIC SCHOOLS of the Republic of Salvador at the close of 1912 was 69,678 pesos, of which amount 20,095 pesos were in the Department of San Salvador. — Sr. Jose Alfaro Moran, formerly acting consul of Salvador in New York, has been appointed CONSUL of that country in the city of New York, and entered upon the performance of his duties as such on March 27, 1913.



URUGUAY

The bureau of labor of the Government of Uruguay is conducting an investigation for the purpose of learning the number of artisans and laborers employed in the industries and commerce of the Republic, the hours worked, the wages paid, health conditions, etc. About 3,000 establishments, representing 40,000 workmen, have already been visited, and an INDUSTRIAL CENSUS is expected to be completed within a period of six months. The investigation so far has shown that organized labor in Uruguay works eight hours a day. —Steps are being taken throughout the Republic for the celebration of the FIFTIETH ANNIVERSARY of the liberty march across the country led by the patriot, Gen. Venancio Flores. — Since 1890 the city of El Salto, Uruguay, has been one of the principal APICULTURAL CENTERS of the Republic. One beekeeper, Sr. Antonio R. Malaquina, who has a number of colonies of Italian bees, produced at last spring's harvest 4,000 kilos of an excellent quality of honey. There are a large number of beekeepers in this neighbor-

hood having only a few hives, and the yield of honey has always been very large per hive and of a fine quality.—The bureau of education proposes to establish in Montevideo two OPEN-AIR PRIMARY SCHOOLS, one for boys and one for girls. If the experiment of operating these schools is successful, efforts will be made to establish similar schools in other parts of the Republic.—A German company has been organized to operate a line of steamers between Montevideo, Buenos Aires, Asuncion, and other fluvial ports, using PETROLEUM as a fuel. The first of these vessels is an 800-ton boat called *Hermann Krabb*, with a speed of from 10 to 12 miles an hour. These vessels will sail under the Uruguayan flag.—A ROAD CONGRESS has been organized in Montevideo. The Congress is divided into three sections: (1) Survey, construction, and conservation of roads; (2) road legislation; and (3) plans for financing road improvements.—A new BANK has been founded in Montevideo under the name of "Banco de Cauiones y Credito." The capital is 200,000 pesos with the right to increase it to 1,000,000 pesos. One of the departments of the bank will deal with the loaning of money to farmers and stockmen.—The Official Gazette of the Republic of Uruguay of March 14, 1913, contains the full text of the MINING CODE recently promulgated by the President of the Republic. The law embodies several important reforms that have been urged for a number of years.—A decree has been issued authorizing the department of posts of the Government of Uruguay to make a special issue of 150,000 STAMPS each of the denominations 2, 4, and 5 centavos in commemoration of the approaching celebration of the centenary of the "Instructions of Artigas." These stamps are to bear engravings historically related to the centenary referred to, and according to the decree were to be placed in circulation between April 4 and 20, 1913. —Work on the PAN AMERICAN RAILWAY, the construction of which was temporarily suspended in March last, has been commenced with renewed activity and an increased force of workmen and employees. The Trinidad to Durazno section will be opened to traffic in a short while, and, if necessary, the company will doubtless be granted a reasonable extension of time in which to complete and open to traffic the entire line. The Pan American Railway will also construct a port for coastwise trade, and has agreed to settle agricultural colonists on 40,000 hectares of land along its lines between Colonia and San Luis.—The department of foreign affairs has issued a decree establishing the PAN AMERICAN COMMITTEE under the direction of the department of state of Uruguay. This committee is composed of Drs. Juan Zorilla de San Martin, José Espalter, Jacobo Varela Acevedo, Serapio del Castillo, and Aristides Dellepiane, the latter being the secretary of the committee. The duties of the committee are to

carry on negotiations looking to the approval of the resolutions adopted by the International American Conferences, supply data to the Pan American Union for its works and publications, submit plans that it may deem desirable to the interests of the Union, and to maintain communication with this institution.

VENEZUELA

An executive decree of March 24 last provides for the establishment of four **METEOROLOGICAL STATIONS** in the Republic at the following places: Merida, Ciudad Bolivar, Maracaibo, and Calabozo, which points represent geographic centers of the country adapted to the study of meteorology. A knowledge of meteorological conditions in the different zones of the nation will be a great help toward the development of the natural wealth of the country, and especially of agriculture, stock raising, and allied industries. Daily reports from the stations referred to will be made by telegraph to the astronomical and meteorological observatory in Caracas, and a written report embodying a résumé of the work of the different stations will be sent to the Caracas observatory monthly. — An appropriation of 4,000 bolivares has been made by the Federal Government for the repair of the **HIGHWAY** from Duaca to Barquisimete in such a manner that it can be used for automobile traffic. The widening and drainage of the La Guaira highway has also been undertaken by the department of public works. — The Government of Venezuela has purchased 40 copies of the work of Dr. Elias Toro entitled "**THROUGH THE GUAYANA FORESTS**" (*Por Las Selvas de Guayana*). The President of the Republic has ordered that upon the completion of the **TELEGRAPH LINE** from Bobures to Torondoy a line be constructed between Aguada Grande and Siquisique in cooperation with the Government of the District of Urdaneta and the citizens of the municipality of San Miguel. — Gen. Juan Vicente Gomez, President of the Republic of Venezuela, has extended the time requested by the **VENEZUELAN DEVELOPMENT CO. (Ltd.)**, successors to the Venezuelan Oilfields Corporation Co. (Ltd.), until January 2, 1914, for the completion of the contract made by that company with the Venezuelan Government on December 10, 1909. — In accordance with paragraph 4 of article 66 of the public-land law of Venezuela, the sum of 10 bolivares per each 1,250 hectares has been provisionally fixed for the granting of permission and registration for the exploitation of the **COAGULATED LATEX** of the trees known as Pendare and Arbol de vaca (Cow tree). The United States Immigration and Steamship Co., of Cincinnati, Ohio,

has submitted a proposition to the Government of Venezuela concerning the construction and equipment of 1,750 miles of RAILWAY in Venezuela at the rate of \$40,000 per mile, or a total expenditure of \$70,000,000, in exchange for choice agricultural Government lands at \$3.07 per hectare. The proposal is part of a scheme to operate 30,450 miles of modern railway in South America reaching countries that have, approximately, 75,000,000 inhabitants. The principal links of the proposed line are from Caracas to Bogota, and thence via Lima, La Paz, and Rio Janeiro to Buenos Aires. The correspondence of the company with the Government of Venezuela relating to this proposed contract is contained in the Official Gazette of Caracas of March 11, 1913. The Government of Venezuela declined the proposal in the form in which it was submitted, giving the reasons for same in an interesting communication dated March 11, 1913. The plan also embraced an extensive colonization scheme by which 600,000 immigrants were to be settled along the proposed railway in the limits of the Republic. According to the geographer Codazzi, Venezuela contains 154,250 square kilometers of cultivable lands, 333,982 square kilometers of lands suitable for stock raising, and 58,954 kilometers of lands that can not be utilized for agricultural and stock-raising purposes. The Government of Venezuela expressed its desire, in the answer to the Immigration Co., that foreign capital should flow into the Republic, and suggested that capitalists interested in the investment of funds in the country study the Venezuelan laws, make a careful examination of conditions, and secure exact data concerning the investment of funds in railway and other enterprises. Dr. Santos A. Dominici has been appointed MINISTER of Venezuela near the Governments of Belgium, Germany, and Great Britain. —Sr. Lino Duarte Coll has been appointed CONSUL GENERAL of Venezuela at Havre, France, and Sr. Adolfo Dupouy CONSUL GENERAL at Antwerp, Belgium. —Sr. Aniceto Lopez Casanova has been appointed SECRETARY OF THE INTERIOR to take the place of Sr. Ramon Hurtado, who has been given the post of consul of Venezuela at St. Nazaire.—Sr. Juan Vicente Camacho has been appointed CONSUL of Venezuela at San Juan. P. R.— The Venezuelan Government has granted a mining concession to Dr. Ascanio Negretti, covering an ASBESTOS mine located in the district of Valencia, State of Carabobo.



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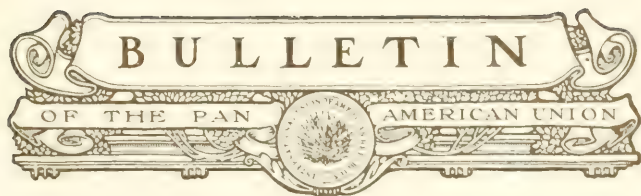
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¹ Absent.



SEÑOR DON ISMAEL MONTES,
Elected President of Bolivia May 8, 1913.



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NO. 1

PARAGUAY IN PROSPECT

PARAGUAY has been pretty well called the "Garden of South America." Situated as is that Republic close to the center of the continent, its lower two-thirds being within the Temperate Zone and only its upper third within the Tropics, the metaphor has a merited significance. Of course the contiguous lands of Argentina, Brazil, and Bolivia have extensive areas where conditions are much the same, but the phrase will always cling to the better-known hills and meadows of Paraguay.

The climate for one thing is markedly favorable to the cultivation of all such products as characterize a garden. Fruits like the orange, flowers like the rose, plants like cotton and tobacco, grow with the simple tillage of the soil. In addition thereto, the immense stretches of the virgin pasture lands along or between the abundant river courses support now or will more generously support in the future the thousands or the millions of cattle demanded to feed a growing world. This climate is warm, but has not the intense or continuous heat of many Tropic or subtropic lands. The thermometer may register 100° F. in the heat of the day during the summer months—the summer months are December, January, and February; autumn includes March, April, and May; winter, June, July, and August; spring, September, October, and November; but even the so-called winter has many comfortably warm days intermingled with the cold ones. All through the year there are days of glorious sunshine with fine energizing breezes, and in reality the climate of summer such as we know it is characteristic the whole year through. Nights are almost always cool, and during the colder weather a snug fire is one of the comforts of a modern home. It is manifestly unsafe to describe all of Paraguay as a climatic paradise, yet most travelers and those who have had a long residence within the country are



SPACIOTTI'S STATION OF THE CENTRAL RAILROAD AT ASUNCION, PARAGUAY.



THE CASA NACIONAL PARAGUAYA

Asunción, Paraguay. Photographed by the U.S. Navy.

emphatic in their praises of its healthful climate, and many express a preference for summer over the winter, so little discomfort do they feel at that season.

Yet climate by itself can not add much to the resources of any land. Soil, moisture, and natural water supply are quite as important, for without all three in conjunction man's activities must be limited. It is a matter of congratulation for Paraguay, therefore, that its soil is rich, its rains frequent and abundant, and that a generous flow of water, accessible in almost all parts of the country, is to be found not only in the rivers and lakes but also at a small distance beneath the surface. Irrigation, therefore, is one of the easiest tasks of the agriculturist. The soil of (eastern) Paraguay consists principally of beds of red earth, above which is a thick layer of humus, of a fertility seldom reached elsewhere. This fertility, to be sure, is to a large extent untried as yet, but it is perfectly reasonable to judge of it from results already accomplished; and if the unsettled parts of the country prove as rich in the future as do those on which agricultural efforts have been exerted, it is a fair conclusion that, acre for acre, the soil of Paraguay will yield as fruitfully as that of any country in the world. The natural water supply of all this area is admirable. Most of the international boundary line is a watercourse; the Parana River is on the east and south; the Paraguay and Pilcomayo Rivers on the south and west, the upper Paraguay also separating the Republic from the State of Matto Grosso in Brazil. Tributary to these giant rivers are scores of small streams, and innumerable watercourses of varying sizes lead into them from undiscovered origins. Not many of these have rapids in them, and certainly none that can boast of the mighty power of the Guayra Falls on the Parana River, separating Paraguay from Brazil. Their value, therefore, must be expressed rather in their capacity for furnishing water to the land than in terms of power for future factories, yet as the country will remain essentially agricultural, this is an advantage that will grow as its usefulness is demonstrated, and this quieter supply of water is at the service of everyone in need of it; because, when water is not immediately available on the surface, it is obtainable with but little effort from a few feet below. Then, again, there is no lack of rain. In fact, rains may be even violent, although of short duration. A general average of 50 inches annual rainfall has been given, which is about the same as that over the southern area of the United States, but higher ranges have been recorded. All these conditions react with beneficial results on the human organization. It is not asserted that disease is unknown in Paraguay; certainly not. It is, nevertheless, a tradition among both natives and more recent inhabitants alike that in Paraguay proper attention to the simple rules of hygiene and of conduct insure a long life and a pleasant one.



LA INTENDENCIA MUNICIPAL — THE MUNICIPAL BUILDING — SANTIAGO

When the building was first constructed, the city was a small town, and the building was the only one of its kind in the city. It was recently constructed.



THE COLEGIO NACIONAL (NATIONAL COLLEGE) IN ASUNCIÓN

This institution was founded in the capital of the Republic in 1870, and in 1877 it began to give the Bachelor's degree in science and letters. Students graduated from it may enter directly into the National University, where the technical degrees like those in medicine and laws are conferred.



THE NATIONAL THEATER IN ASUNCIÓN

Every national capital in Latin America has its theater or opera, called "national," and many of the other important cities also take pride in the municipal theater. In all cases these are supported by public funds, and practically every season some well-known company of artists, sometimes actors, sometimes singers, not unusually both, are invited to give performances in these theaters. Asunción is no exception to the rule, and this theater will entertain distinguished artists for the pleasure of the people of the city.

These favorable conditions about the promising country of Paraguay are not so well known as they ought to be, and perhaps some people may be inclined to ask for authorities on the subject in order to obtain further information and details. Fortunately the BULLETIN is in a position to supply such a want, and, in fact, this article hopes to call attention to the growing literature on that South American Republic, and to the substantial opportunities which are presented through the pens of others.

Take, for instance, "Picturesque Paraguay, a Land of Promise," by Alexander K. Macdonald (London, Charles H. Kelly, 1911. 498 pp., duodecimo, with many illustrations. Price, 16 shillings.) A book written with the enthusiasm of the traveler, of the observer, and of the man of affairs who has seen the development of new lands in many parts of the world, and who nevertheless can find but few defects and many virtues in the country about which he writes and where he has lived for 15 years. He has chapters on forest products, on agriculture, fruit—chiefly bananas, however, although many other fruits thrive in Paraguay—, cattle raising, and on other economic problems. He adds remarks also on sport in central South America, and concludes with the advice that young Englishmen ought to take serious consideration of the splendid chances for home making and money getting in Paraguay. Everything Mr. Macdonald says for the benefit of his fellow countrymen will apply with equal force to natives of the western continent, and if any one wishes to read the favorable side of the story and to find out what others think of a so little known and sometimes misjudged region, no better source of information can be consulted.

"Picturesque Paraguay" deals almost exclusively with the present and future. There is one chapter given to the work of the early Christian missionaries 350 years ago. But to catch a closer, a more intimate glimpse of that almost miraculous performance in the regeneration of a people, one should read "In Jesuit Land," by W. H. Koebel. (381 pp., large 12 mo., with 55 illus. London, Stanley Paul & Co. Price, 12 shillings, 6d.) Mr. Koebel's name is well known as a constant writer on the countries bordering on the Rio de la Plata, but this latest volume of his seems to be a real tribute, a spontaneous expression of his own personal experiences and adventure in traveling through the eastern territory of Argentina called Misiones. He offers an interesting contrast between the old Misiones and the new. At the present day the new Misiones is rapidly losing the calm and isolation which have characterized that part of the world for so many generations. It is invaded by the railroad, it has colonists, some from Argentina itself, some from Europe, the stolid Poles being seemingly those who partake most enthusiastically of the opportunity offered, but not a few being the direct descendants of those aboriginal



THE BANCO MERCANTIL COMMERCIAL BANK IN ASUNCIÓN

The bank, which was founded in 1891, and its business has demanded the erection of this substantial structure, which is designed for its purpose, and has all modern fixtures and devices to that end.



THE PALACE OF JUSTICE

Among the newer buildings in Asunción is that constructed for the law courts, or the Tribunal of Justice, as the Spanish phrase is. This palace is situated on Calle de las Palmas, not far from the river bank.


$$\text{CH}_3(\text{CH}_2)_n\text{COOAg}(\text{HCO}_2\text{CH}_2)_n\text{K} \rightarrow \text{CH}_3(\text{CH}_2)_n\text{CO}_2\text{H} + \text{HCO}_2\text{CH}_2(\text{CH}_2)_n\text{K} \quad n = 3, 4, 5, 6, 7, 8, 9, 10$$

inhabitants whom the Jesuit mission fathers so tirelessly and lovingly redeemed from their savagery into a unique yet highly developed civilization.

Misiones belongs to Argentina, although geographically it is intercalated between Brazil on the south or southeast and Paraguay on the north or northwest. Its whole prerevolutionary history is, however, a part of that wonderful movement that accomplished the socialization of the (Paraguay) Guaraní Indians: its natural characteristics are essentially those of much of the southwestern portion of the Republic of Paraguay to-day. And Mr. Koebel describes it lovingly. He is sympathetic toward the old missions and does not hesitate to challenge any enemy of the Jesuits to try to prove that they did not leave the Indians better than when they were discovered. His enthusiasm extends also to the present and future prospects, agricultural and commercial, of all this land, both in Argentina and in Paraguay, which once was occupied by the Indians and the Jesuit fathers. His observations support the statements of others that no more promising country in all South America lies open to the land hungry, and that the traditions of Misiones will give place to a more active life when once this fact is known.

If added proof is required, it may be found in a little pamphlet, issued probably as a labor of love ("Apuntes relativos, al Porvenir de la Agricultura y de la Ganadería en el Paraguay. Por Carlos R. Santos. Asunción, 1912") toward the author's country. In the preliminary remarks and in the four chapters with the Appendix the many phases of agriculture, cattle raising, climate, natural products, and possibilities of life in Paraguay are succinctly analyzed, with the result that the wish for a still further expansion of activities in South America may soon reach fulfillment. Data are given concerning the cultivation of tobacco, cotton, linseed, and other subtropical products, with suggestions on the possibilities of cattle raising, which is just attracting the interest of practical cattlemen from other parts of the world. Even rubber may be grown in the northern area of the Republic.

There are two publications from which much general information can be obtained, and these have the stamp of the approval of the Government; they carry, therefore, quite a complete picture of Paraguay to-day, with a carefully prepared résumé of the history and laws of the Republic. "La República del Paraguay en su Primer Centenario (1811-1911)," by Sr. Ramón Monte Domecq,¹ is a handsome quarto volume of close to 500 pages, profusely illustrated with views of all kinds from copies of prints of historical personages to scenes from modern life and photographs of well-known people of the present. "Album Gráfico de la República del Paraguay," by Sr. Arsenio Lopez Decoud,

¹ These two books are to be obtained from the publishers, the former in Buenos Aires, Compañía Sud América de Billetes de Banco; the latter from the Talleres Gráficos de la Compañía General de Fósforo also in Buenos Aires.



ONE OF THE CAVE ENTRANCES IN THE MOUNTAIN OF THE UPPER MOUNTAIN IN THE CAVE



CUTTING AN EXTENSION OF THE PARAGUAY CENTRAL RAILWAY AT PIRAPO, PARAGUAY

has 544 pages of quarto, and is equally well illustrated. Its subject matter is about the same as that of the other, and the chapters are devoted to about the same end. As an exposition of Paraguay, past and present, no better source of knowledge can be found.

But should anyone desire more contemporary information it may be sought in an English periodical publication that has recently begun to issue from Asuncion. "Paraguay," a monthly newspaper the yearly subscription is \$1 gold to all addresses, the first number of which was dated October 31, 1912, and which is now on file in the library of the Pan American Union. It is not alone the zeal of the editors which leads one to see the activity of plans for development of this attractive country; that is probably characteristic of any paper published with similar purpose. The facts themselves, as given without comment, indicate the interest aroused in Paraguay as a field for work and for investment. Moreover, the numerous enterprises already started show how keenly alive investors and home seekers are to the hitherto neglected opportunities in Paraguay.

A simple quotation will serve to convey the spirit with which men of affairs are considering this region of South America. "Paraguay," so says this monthly—

Is now starting on a new era * * * Large tracts of Chaco land were in the hands of foreign owners, who had secured them for a mere song some twenty-odd years ago, and have been expecting their value to increase as did land in Argentina and Brazil; or, in other words, to make a fortune sleeping. * * * Then (foreign) initiative stepped in, which practically means the opening of unknown and uninhabited regions, a work of higher civilization, resulting in an influx of immigration and the circulation of capital.

Or, another quotation:

Paraguay for many years to come can provide cheap grazing, and the occupation of a large territory in the Chaco * * * has shown a lead which can with difficulty be overtaken.

Many more paragraphs of like significance could be repeated here, but these are enough. They indicate the tendency of the recent movement in South America, and that investors are confident of the future of the Republic.

Immigration as well is attracted toward this region. There are liberal laws to encourage settlers, and the individual or a number of families forming the nucleus of a colony are sure of a good reception, of proper treatment, and assistance in getting started. Germans, Austrians, and Italians, with many Spaniards, form the bulk of the new arrivals, but almost every European nationality is represented in the list, and even some of the learned professions are included.



THE GERMAN COLONY OF SAN BERNARDINO, ON LAKE ITAIPU, PARAGUAY.



HOTEL ON LAKE UMBAGOG

THE HOTEL ON LAKE UMBAGOG, NEW BRUNSWICK, N. J. (1906)

100 30 2 16

During the last session of Congress a homestead bill was introduced, its endeavor being to encourage the small estate holding and to secure and perpetuate the home. The essence of this bill is to give, free of charge to inhabitants of the Republic and to foreigners declaring themselves immigrants * * * an extension of fiscal land (of) 75 hectares (185.32 acres), under the sole condition that they establish their homestead on the spot thus acquired. The obligations on the part of the State are many, and the immigrant will surely profit thereby; the obligations on the part of the settler are few and can be completely satisfied by any person able and willing to work, but with even less effort than is required for successful agriculture in a more rigorous climate.

Probably the immediate question arising in the mind of all who are ignorant of the simple facts here given, but who should be pleasantly surprised to learn them, will be as to the accessibility of this supposedly isolated region of South America. But Paraguay is no longer isolated. Many residents of Buenos Aires are quite in the habit of going to Asuncion, or to one of the pretty lakes in the interior close to the capital, for their winter outing, to avoid the more trying season of their own country. They think nothing of the four or five days in the first-class steamers plying frequently up and down the La Plata and the Paraguay. It is no more of a trip from one capital to the other than it is for the people of the north of the United States to go to Florida for its sunny skies and smiling landscape. But for those who do not care for the river trip there has lately been opened an all-rail route between Buenos Aires and Asuncion, which shortens the time and adds somewhat to the variety. Through trains are on the service to make the run in 56 hours; dining and sleeping cars of the very latest improvements combined with first-class accommodations, built with every modern idea for ease and comfort, are provided for passengers, and the trip may be compared with that from Boston to New Orleans. Looking further into the future, the imagination is not overtaxed to see the completion of the east and west railway now in construction¹ from the Brazilian coast to the Paraguayan frontier and capital, along which there is sure to flow a steady stream of immigration and traffic. Or with still more extended prophecy, one can be confident of the completion, ultimately, of the projected line westward from Asuncion into Bolivia, where it will connect with those railways already built which have their terminal points on the Pacific Ocean. Indeed, Paraguay is by no means out of the world. It has begun to take its share in the new life of South America. To give an idea of the

¹ There are now 1,500 workmen engaged on construction at the fifth kilometer from Botia, the station on the line between Villarica and Encarnacion. The terminus of this new railway in Paraguay is to be the Falls of Iguaza.



THE NEW COUNTRY IN THE WYANDOT COUNTRY

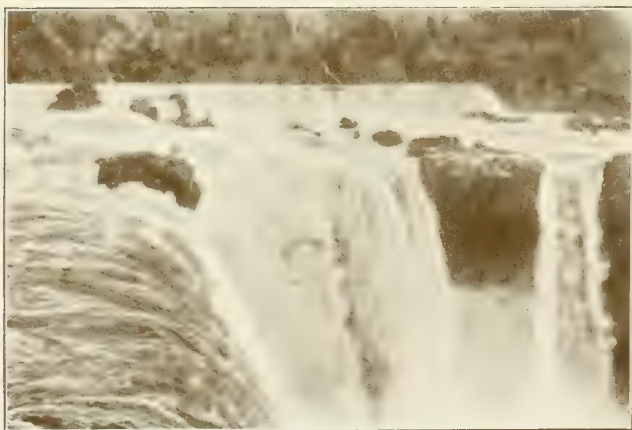
The photograph is a reproduction of the original photograph of the same scene, taken by the author, and is not a reproduction of the original photograph of the same scene, taken by the author.

commercial activities of Paraguay, the following tables are presented which have been furnished by Dr. Hector Velázquez, the distinguished minister of Paraguay at Washington (the values are given in the gold dollar):

1910			1911		
Countries.	Importation.	Exportation.	Countries.	Importation.	Exportation.
Argentina	\$697,080.17	\$2,858,003.80	Argentina	\$774,959.78	\$3,721,866.24
Austria	15,558.28	350.00	Austria	109,314.82	12,486.20
Belgium	154,442.14	12,344.79	Belgium	110,430.07	22,443.70
Bolivia		2,194.90	Brazil	58,369.97	46,769.72
Brazil	45,592.06	156,227.24	Chile	4,127.52	
China	7,206.26		England	1,850,201.86	818.15
England	2,995,777.42	15,620.59	France	431,503.23	74,629.40
France	29,965.42	25,514.99	Germany	1,817,667.37	1,020,475.35
Germany	1,141,592.22	904,846.40	Holland	16,960.80	5,750.41
Holland	14,106.39	1,050.10	Italy	351,854.87	24,885.00
Italy	34,582.59	86,426.59	North America	389,528.88	1,722.00
North America	318,862.94	2,146.80	Portugal	14,087.58	4,000.00
Spain	375,964.59	37,554.72	Spain	413,625.21	157,848.40
Switzerland	7,315.86		Switzerland	9,333.29	
Uruguay	16,907.85	591,884.72	Uruguay	51,135.58	729,385.98
Total	6,496,412.00	4,946,918.25	Miscellaneous	75,398.87	5,874.05
			Total	6,478,499.70	4,828,917.29

The Year 1909 shows these totals:

Importation	\$3,787,646.58
Exportation	5,436,638.24



A VIEW OF ONE OF THE FALLS OF THE GUAYRA, IN THE RIVER PARANA.

These magnificent falls are in the Rip Parana, where it bounds the Republic of Paraguay from the Republic of Brazil. Undoubtedly its beauty can be compared with that of Niagara, or of its nearer rival, Iguazu, but its great value lies in the use for water power. The tremendous force of the fall will be sufficient to supply power over a great area.

A CARIBBEAN CRUISE

DURING the month of October, 1912, Mr. Joseph Wheless, an attorney of St. Louis, Missouri, who has had considerable experience with commercial enterprises in the countries south of the Rio Grande, made a trip of inspection to some 15 islands lying in the Caribbean Sea and the Gulf of Mexico on behalf of a syndicate which had secured from the Mexican Government concessions to exploit certain guano deposits and other mineral resources. As the islands upon which the investigations to be made were within a radius of several hundred miles around the peninsula of Yucatan, it was deemed best to engage a special craft to carry the party to the necessary points and thus enable it to conduct observations leisurely. Mr. Wheless was accompanied by an engineer, and leaving St. Louis on October 16 they proceeded to New Orleans and thence to Habana, where they chartered a vessel for their purpose.



THE LATH STATION AND STOREHOUSE AT A LITTLE KNOWN ISLAND IN THE GULF OF MEXICO.

The boat secured was a fishing schooner, the *Juanito*, of the type known as a "vivero," shortly described by the author, and the crew which manned this sturdy craft was indeed a picturesque group of native seamen. As Mr. Wheless possessed the desirable qualification of being a Spanish student, and able to converse fluently in the Castilian tongue, he found no difficulty whatever in directing the movements of this expedition.

The novel experiences and sometime thrilling adventures which the party enjoyed on this trip are of absorbing interest, while the story of the journey itself is replete with such fascinating incidents as have made the tales of the early buccaneers so engagingly charming. Mr. Wheless has vividly and graphically described his trip in the southern waters, and we quote from his story as follows:

The *Juanito* is a fishing schooner of the type known as a "vivero," the bottom part of the hold forms a big tank, both sides of the hull being bored full of holes, so that the water of the sea fills and circulates freely through it, the fish being thrown

into the tank as soon as caught, and thus brought alive into port. It was about 77 feet overall, drawing 13 feet of water, rough but strong, and in the hands of a competent skipper, worthy to sail any civilized sea. * * *

The *Juanito* was rather short on comforts, having only a little underdeck cabin, with four bunks and no bedding. * * *

However, it was comparatively in the Pullman palace car class, and regretfully remembered as a luxury, when we started on a later part of the voyage in the canoe *Delia* out of Campeche.

After a delay of 15 days in Habana waiting for the *Juanito* to undergo some repairs and otherwise prepare for the journey, and incidentally awaiting the calming down of the heavy seas due to the prevalence of "northers" on the Gulf at that season, the party put to sea on November 5, the day of the presidential election in the United States. The author continues:

Before a stiff wind and in a rough sea, very curiously interspersed with sudden calms, we sailed westward along the Cuban coast, sighted the lighthouse of Cape San Antonio, the western point of Cuba, about noon of the 8th, and struck out nearly due west across the Yucatan Channel, heading for the island of Contoy, on the Mexican coast of Quintana Roo, one of the guano islands of our concession. Another "norther" was on, and the sea was very heavy for all the more than a hundred miles to the Contoy Light.

To a landsman every feature of the surroundings was novel and full of interest, though but little of detail can be mentioned here. In the daytime it was ardently hot; we wore only pajamas and low tennis shoes on our bare feet; but after nightfall it became quite cool, and then we put on all our clothes, shoes, and hats, in which to sleep, prone on the deck, with some sacks and our raincoats for bedding. The crew of eight sailors, most of whom were Catalan and Vizcayan Spaniards, and the "skipper" were very picturesque, tattered, weather-beaten, barefooted, and genially profane. These Spanish sailors followed the very curious custom of their race in the way they drank their wine, which was served regularly at our two daily meals, breakfast at 11 and dinner at 5. The wine was brought on in a curious glass vessel of the chemical-laboratory type, with a long spout. This each Spaniard in turn would hold at arm's length before him and above his head, throw back his head, open his mouth, and with unerring precision cause the stream of wine, after prescribing a parabola a yard long, to fall into his mouth, never missing aim however rough the sea. * * *

Referring to the bill of fare on board ship, he writes:

Our daily provender was cooked up, fearfully and wonderfully, in big iron kettles and verily drowned in grease and choked with garlic. These original packages were then set on rings of rope on the deck; all hands gathered around, sitting or squatting on deck as best each could, tin plates and spoons were passed, and in peace and harmony we each dipped into the pots and helped ourselves, dispensing with the refinement of knives and forks. Not infrequently, while thus engaged, would the waves break over us and add a dash of salt to our food, an ingredient which was not put into it by our cook, and most of the time we ate, balancing our plates, with difficulty, so as not to lose the contents and realizing that there is "many a slip 'twixt the cup and the lip."

During calm waters, when progress on the journey was practically at a standstill, fine sport in deep-sea fishing helped while away the dragging time. A singular practice which obtains among Cuban fishermen, due to a natural phenomenon of the sea, is thus described:

The Cuban fishermen have an odd practice, which results from an interesting phenomenon. As the fish are caught at great depths—where the water pressure is

very high—upon being drawn to the surface the pressure decreases and they become filled with air, so that they swell often to the point of bursting and, of course, dying. To prevent this, and save the fish alive, as soon as they are landed on deck the fishermen stick them in the side behind the fin with a sharp-pointed metal tube through which the air rushes out with a sharp whistling sound; the fish are then thrown into the tank, and appear to be none the worse for the experience. Sharks being very numerous in these waters, we caught numbers of them, some quite large, others young and tender. Later, at Progreso and Campeche, in Mexico, we found young shark to be a very popular article of food, being sold in all the people's markets. And on that latter trip, the principal item furnished for our food was dried shark meat. The flesh is very white and delicate, with a peculiar sweetish taste, and is not at all bad, though I did not particularly "hanker" for it. We also added a number of the small sharks which we caught to our sadly deficient larder and ate them when we could not get a better brand of fish. Nearly every shark, large and small, which we caught, had one or more parasitic "shark suckers" firmly attached to it by the peculiar corrugated vacuum-process "sucker" which forms the top of his flat, elongated head. * * *

Often large schools of these shark suckers followed our boat, tightly glued to the hull by the tops of their heads. We also caught many starfish, eels, jellyfish, crabs, turtles, sea snails, flying fish, and other, to us, unusual marine animals. The jellyfish, the Spanish name for which is "agua mala," or "bad water," are the most curious of all, beautiful and filmlike as they work themselves through the water, but not very attractive upon closer inspection.

At midnight of the third day out the vessel dropped anchor off the Contoy Lighthouse in a heavy sea which had driven it all the way across the channel. The following day it was decided to run for shelter to the island of Mujeres, about 20 miles to the south, and a snug anchorage was found off the little town of Dolores. Here the party was tied up for 12 days on account of the "norther." The surpassing clearness of the sea, however, where the *Juanito* was anchored, is picturesquely described as follows:

The *Juanito* was anchored about 1 mile off the shore, in 30 feet of water; but so clear was the water that the bottom and every rock and bed of seaweed on it were plainly visible. At night the surface of the water was alive at times with a very bright phosphorescent glow of some sort of animal life, called in Spanish "candelilla," which would float by with the current and defied all our efforts to catch them in a bucket. First round and glowing, in size like a silver dollar, they would elongate themselves to maybe 18 inches, like a band of molten gold, then spread out into a very tenuous and shapeless glow, about a square foot in area, on the surface of the clear water. Here, and more strikingly in the Gulf waters of Campeche, the water at night was a phosphorescent pyrotechnic display, every ripple and splash being a burning golden glow, and fishes moved through the water like streaks of living fire.

Mr. Wheelless then speaks of the many islands along the channel coast of the peninsula, some of them low and sandy, others high and very rugged, covered with cactus, thorny brush, and other tropical jungle vegetation. Of the bird life, he writes:

Aquatic birds of every kind—gulls, penguins, albatrosses, cranes, herons, rabiocolas, bobos—inhabit these islands in countless numbers. It was to me novel to learn that birds of webbed feet and seafaring nature roost in trees, but such I saw to be the case, and the thickets were alive with these various kinds of sea fowl. The tropical vege-



DINNER OF THE PAN AMERICAN SOCIETY. .:

THE annual dinner of the Pan American Society of the United States took place at the Hotel Waldorf-Astoria, New York City, on the evening of May 15, 1913. It is no exaggeration to say that it was a brilliant success in every respect, surpassing the most earnest hopes of those in charge. This second banquet of the society since its organization, under the initiative of the Director General of the Pan American Union, about two years ago, was attended by nearly 700 guests, or about 200 more than were present at the first dinner, held approximately one year ago.

The presiding officer was the Hon. Henry White, president of the society, formerly ambassador to France, and chairman of the United States delegation to the Fourth Pan American Conference. The chief guests of honor were the Hon. William Jennings Bryan, Secretary of State of the United States, and chairman ex officio of the governing board of the Pan American Union; Sr. Domicio da Gama, the ambassador from Brazil; and the other diplomatic representatives in Washington of the American Republics.

Following the excellent and appropriate introductory remarks of President White, notable speeches were made by Secretary Bryan, Ambassador da Gama, and Talcott Williams, of the School of Journalism, Columbia University. Other persons of note at the guest table were James W. Gerard, of the Supreme Court of New York, and president of the Mexico Society; Thomas J. McCluskey, S. J., president of Fordham University; Robert Bacon, formerly Secretary of State, and ambassador at Paris; Lloyd C. Griscom, vice president of the Pan American Society, and former ambassador to Brazil and Italy; Brig. Gen. Enoch H. Crowder, Judge Advocate General, United States Army; Dr. John H. Finley, president College of the City of New York; Dr. J. Julio Henna, president Club Ibero-Americana; and the Director General of the Pan American Union.

All of the consular representatives of Latin America were also present at two special tables near the speakers' table. The list of distinguished persons present is a long one and there is space to name only a few, among whom might be mentioned: Gen. Nelson A. Miles, Dudley Field Malone, John Hays Hammond, George W. Perkins, Frank A. Vanderlip, Charles Page Bryan, Otto Kahn, George F. Peabody, W. Fellows Morgan, Archer M. Huntington, Cabot Ward, George T. Wilson, Charles B. Alexander, Samuel Untermyer, John



THE EASTERN AMERICAN SOCIETY OF THE LATIN AMERICAN COLONIZATION SOCIETY, 1904. THE WALDORF-ASTORIA, NEW YORK.

Claffin, Perry Belmont, Paul Warburg, John D. Crimmins, Ralph Pulitzer, Herbert Parsons, Judge Victor J. Dowling, George B. M. Harvey, Charles D. Norton, William Nelson Cromwell, Ramon Guiteras, James M. Motley, J. F. de Barros Pimentel, Willard D. Straight, Norman Hapgood, Martin Egan, Frederick Allen, James Speyer, Elbert H. Gary, Henry W. Taft, Dr. Albert Shaw, Finley J. Shepard, Henry Morgenthau, Isaac N. Seligman, Severo Mallet-Prevost, Frederick Strauss, James A. Farrell, Thomas A. Eddy, R. A. C. Smith, William Loeb, jr., John P. Mitchell, Thomas Kearny, E. N. Breitung, Leigh Hunt, Luis F. Corea, Charles M. Pepper, Manton M. Wyvell, Michael Ford, Herman Seikeken, J. P. Grace, Robert Grier Monroe, Lawrence L. Gillespie, Lorenzo Daniels, Lawrence F. Abbott, C. B. Landis, P. S. Du Pont, Oswald Garrison Villard, Charles M. Schwab, Charles R. Flint, E. G. Grace, J. G. White, Prof. Hiram Bingham, Romeo R. Ronconi, José Richling, A. C. Rivas, Col. William T. Russell, United States Army, Justus Ruperti, Ernesto T. Simondetti, Mahlon C. Martin, Daniel Bacon, C. A. Green, John A. Schleicher, Arthur W. Page, Lindon W. Bates, Alberto Falcon, M. de Moreira, Gen. James A. Drain, Michael F. Doyle, Phanor J. Eder, Arthur Ruhl, Lamar C. Quintero, Louis N. Hammerling, Joseph J. Slechta, F. J. Tietsort, Leopold Grahame, Sherbourne G. Hopkins, Franklin Johnston, Edmund L. Baylies, Col. W. M. Black, George C. Boldt, R. C. Clowry, Maurice Coster, Julien T. Davies, Howard C. Dickinson, Manuel Vengoechea, Samuel M. Jarvis, Frederic B. Jennings, Capt. H. R. Lemly, Edward E. McCall, Basil Magor, James E. Martine, William P. Northrup, Ralph Peters, Frank L. Polk, William Stackpole, Edward N. Tailer, William Thomson, Alvin Untermyer, Rev. Dr. George R. Van de Water, Walter Vernier, Bronson Winthrop, Louis Wiley, Daniel Willard, M. Orme Wilson, George H. Wykes, Luis F. Yglesias, O. A. Zayas.

Great credit is due the subcommittee on arrangements consisting of James M. Motley, Ramon Guiteras, Archer M. Huntington, W. Fellows Morgan, and Cabot Ward, but special praise should be given to Frederic Brown, the efficient secretary-treasurer, who worked with untiring energy in developing the details of the dinner. The menu book which was prepared under his direction was most artistic and reflected credit upon his good taste.

It is not possible within the limits of the MONTHLY BULLETIN to publish in full the addresses delivered on this occasion. As usual, President Henry White in felicitous terms introduced the speakers. The first address was by the Brazilian ambassador, who, as the ranking Latin American diplomat, spoke for the diplomatic representatives present. On arising, after being greeted by earnest and gratifying applause, Ambassador da Gama opened his speech, which he delivered in English with the composure of an accomplished orator, by referring to his address of a year ago in which he spoke of the

"mutual strangeness as the principal obstacle in the way of international good relations." As none of the other speakers on that occasion had pointed out a solution to that observation he consulted Senator Elihu Root, a friend of Pan Americanism, who suggested to him that the remedy to this circumstance was to "go and get acquainted." This reminded the ambassador of a sentiment which he had expressed nearly 25 years ago on the matter of getting acquainted with foreign peoples when visiting among them by looking at things from their standpoint and through their eyes, and he agreed with Senator Root that "one must be optimistic when dealing with foreigners if we really wish to understand them." Following this apt introduction, the ambassador went on to say:

Three Secretaries of State of the United States have used it these last years and they can bear witness of its efficiency for the improvement of their minds and hearts. One of them, who is sitting with us to-night and by right of office is our honorary president, started three years ago as a tourist on a trip along South America and returned a Pan American. Some of us who heard him speak about free trade in ideals and say that "we need each other" are not far from believing that that voyage entered for much in his determination to accept a part of collaboration in the President's policy of respect and assistance to the people of his own continent and all questions which the peoples more directly interested in should know better how to settle. He was lately heard to say that being a strong nation, accepting its place in the sun, the United States has more duties toward the small countries than toward the great powers of the earth. This is certainly a noble and generous thought, that elsewhere he developed with an explanation that the mutual duties between nations are always the same, irrespective of their relative importance: only the slights from the great are more easily and deeply resented by the small, because they have no physical power to enforce their claims and obtain a redress for the damage suffered. At all events and this imports most of all in association with this pressing policy righteous and just acts are following the wise words and turning an international program into a grateful reality, that allows hope to germinate in the breast of the most skeptical observer.

Is this not a beautiful result for a voyage enterprised with the sole intention of having a restful vacation? And considering that the benignant traveler had only his good will as a moral equipment, that he could keenly see and feel but not hear so well, hindered as he was by the barrier of languages, we can imagine what he might have attained had he the ideal preparedness of my model traveler, with power and taste for contemplation. Or else, since the expectations were so high, exceeded in this particular case it might appear as though of all those requisites only the moral one, the optimism and good will advised by Senator Root, would be essential to the understanding of peoples. And we need not insist upon this, the applications of the general principle being easily deducible and depending entirely upon the personal conditions of brain and heart. Of brain and heart we must take *quantum satis*, or better the most we can get in our dealings with foreign people, in we must remember that nothing of shyness that makes diffident and is childish, but makes us reasonable among strangers. And we must also avoid the contrary excess of boldness that renders us when through self-consciousness and a too subtle sense of superiority. This sense of superiority which hinders a friendly social intercourse, dulls his perception for the details and shades of alien life, makes him superficial in his presumption. It was an observer of this kind who, renouncing to explain why the Portuguese colonists in Brazil in the eighteenth century used to sleep with a leg prudently hanging out

of their hammocks, concluded carelessly and disdainfully, "If you ask me why, I shall answer that I am sure I do not know; it is probably the custom of this crowd." He used the word *canaille*, because he was a Frenchman, but the sentiment he expressed is not peculiar to French travelers, nor is it a thing of the past. We may have more than once repressed in ourselves the tendency to that too easy criticism which turns things unexplained or sentiments unshared into ridicule and fun, and breaks that gentle current of sympathy that brings men together and is the reason and the joy of human life.

Now, Mr. Chairman, I probably have spoken too much without saying enough. But this is a common lot of after-dinner speeches with a purpose. They always seem heavy—loaded with good intentions. As an excuse I might say that I am too much in earnest to speak lightly about a matter that touches us so deeply. And some day, that I foresee not very remote, I may take our present situation of mutual strangeness as a lesson of the past, as a proof that in international relations, as in social life, justice and respect and good will are orderly, constructive sentiments that are taking every day a larger place in the heart of the civilized man.

At the conclusion of the Brazilian ambassador's speech Mr. Talcott Williams, head of the school of journalism of Columbia University, was introduced. He made a remarkably interesting speech, pointing out the influence of journalism upon international relationship and what an extraordinary factor the newspapers are in the development of closer acquaintance, greater commerce, and lasting peace among the nations of the world, and particularly among those of the Western Hemisphere. It was one of the most thoughtful discussions of its kind which has been heard for a long time at a banquet in New York.

When the Secretary of State, as chairman ex officio of the governing board of the Pan American Union, was introduced he was given an ovation, showing the appreciation of the audience of his first appearance in the rôle of Secretary of State before the Pan American Society.

In beginning his remarks Secretary Bryan spoke of the great pleasure which he experienced in being a member of the governing board of the Pan American Union. One of the influences which had impelled him to accept the position of Secretary of State had been the thought of association with the diplomats of Latin America. He so enjoyed his position that he hoped always to stand in the way of the Secretary of War and the Secretary of the Navy being called upon to settle any questions with the nations south of the United States. He made felicitous reference to President Henry White, of the Pan American Society, to Ambassador da Gama and his address, to Talcott Williams and his discussion of journalism, and referred happily to his own experiences as an editor.

Proceeding, he said:

My subject for to-night was suggested by one of the speakers who preceded me. I believe that the distinguished gentleman who honors his country and is honored by it, the ambassador from Brazil, has given us what might well be accepted as the keynote of this occasion. He has emphasized the importance of sympathy. He has

told us how truthless is a vessel to a nation, if it is not as popular as water in the spirit of the people among whom he lives. And I do believe, I do think, I shall have done enough if I can impress upon you, even more deeply than his eloquence did, the necessity for sympathy in our dealing one with another; sympathy is the great need of this world. Tolstoi was so impressed with the idea that he indorsed the bread-labor theory advanced by Bondariff, and gave as his reason for it that it was the only way in his judgment in which to be able to keep in sympathy with the mass of the people. He said that it was not sufficient that one should have toiled in the past—that it was necessary that he should continuously toil in order to be able to understand the toil of others and the point of view of those who toil. Whether he was correct in the belief that this was the only means of assuring this sympathy, or whether it can be secured more effectively through other means, is not material to my subject, but I do believe that the great Russian philosopher put his finger upon the vital need, sympathetic interest in others. We should link ourselves to them, and I am glad to elaborate that thought to-night as we are assembled here, related as we are by the ties of neighborhood, by a community of governmental ideals, and by an increasing intimacy in our material relations.

The Isthmus of Panama is only 2,000 miles from here—that means that all the country on this side of the Isthmus is 1,000 miles nearer to us than the lands across the Atlantic. The northern countries of South America are closer neighbors than the nations of Europe, and when the canal which is soon to divide the Isthmus connects us with the western coast of South America we shall be brought even nearer to these Latin-speaking people. I desire, therefore, to present for your consideration three thoughts.

First. The material interests of these countries must bring them nearer and nearer together. To the south of us are countries but partially developed. During the next century they will witness there the amazing development that we have witnessed in this country during the last 100 years. My visit to South America was made for the purpose of informing myself as to the possibilities of that country, and while my good friend is correct in saying that my interest in South America and Central America was deepened by this trip, I think I ought to tell you that I am a pioneer in the manifestation of interest in this subject, for when I was but a young man I was in full sympathy with Secretary Blaine in his desire to bring the nations of America closer together. It was this feeling of friendship and of interest that took me there, and it was strengthened by what I saw there.

Those countries need that which we have in abundance and to spare. We have capital here; they need capital there. We have the constructive genius that has made possible our tremendous development, and we have the experience that has directed both the capital and the constructive genius. We are about to finish the most gigantic engineering feat that man has ever undertaken; and down there, in this land—almost newly discovered—there are opportunities waiting. No other nation is so naturally their friend and helper. To no other nation can they so properly look, and in no other direction can our people expect to be so richly rewarded for any service that they can render. If we are to deal with South America, we must deal upon a basis that will keep them friends, and there is but one basis upon which they can be kept friends. I speak on this subject the more freely, because our President has been in office long enough to give evidence not only by his words, but by his deeds, that he understands the basis upon which permanently good relations can be maintained between the United States and the Latin-speaking Republics. He believes that that country is a legitimate field for American investment, and he is glad to encourage every proper extension of American enterprise. Notice how important "legitimate" and "proper" are. As one incident is closed, as one illustration now stands out completed, I may be permitted to refer to it. It is history.

In Ecuador there is a railroad built by a company organized under the laws of a State in this Union, and in that contract, between the railroad and the Government, there is a provision that in case of controversy the subject in dispute is to be submitted to arbitration. In the first instance the President of this country and of Ecuador were to be the arbitrators. If they could not act they were to select each an arbitrator, and if they could not agree, then a third was to be selected by agreement. We found that a man had been sent there who was not satisfactory to Ecuador, and upon examination of all the facts in the case, the President decided that the man who had been sent did not measure up to the requirements of the contract between Ecuador and the railroad, and without any reflection upon the character of the man who had been sent there—without desiring to criticize those who had sent him, the President felt it his duty to recall the man who had been sent there, and to select another man—and how was this selection made? Just as it would be made in any court in this country. A man was found who was believed to be without bias—a man who could hear and decide as impartially as a judge. He was questioned to find out whether there was objection that could be properly made, and when he appeared to fulfill the requirements of that contract, the railroad was asked if it could find objection to him. Upon examination, it was reported that he was satisfactory. The Government of Ecuador was asked if it could find objection, and the Government replied that he was satisfactory. After scanning the man and inspecting him—after dealing with him as we deal with a juror or a judge in this country, we said to Ecuador, “Here is a man who represents our ideal of justice, equity, and fair dealing between republics.” Does anyone think that this is going to injure American business? I am not credited with a large knowledge on business subjects, but I stand best among those business men who carry morality into their business enterprises, and, if I understand business, it can not properly be disconnected from the fundamental principles of fair dealing.

I am in hearty sympathy with the President in the belief that we open the doors of those countries to our investors most surely when we assure those people that every man going from the United States will be expected to carry a high sense of honor with him, and to give those people a dollar's worth of service for every dollar that he asks from them as recompense. The foundation upon which permanent business can be carried on between nations is not different from that which underlies successful business in this country, as between man and man. When the business relations of these countries are put upon this foundation, they rest upon the only sure foundation. It is the foundation upon which those stand who feel a sympathetic interest in the people with whom they deal. The business manifestation of this sympathy will make them deal with each other as brothers and as friends. The Latin American countries are not a mere field to be exploited, from which to gather great profits to-day, regardless of the influence on to-morrow.

But our sympathy with them not only controls our business relations, but it suggests an intellectual exchange. I feel a great interest in having our peoples brought closer together intellectually.

He then pointed out that although he did not speak the Spanish language he had found throughout Latin America a remarkable knowledge of English, and also an appreciation of the United States and its institutions, which impressed him. In this connection he, among other things, said:

I found everywhere that this intellectual intercourse had brought our people closer together, as I have found here that our people become better acquainted with those countries by association with the students who come and by those who travel in those lands. I was told the other day that we had sent some 15 teachers to Uruguay, and that at this time 1,500 young men are attending our colleges from South America.

A year ago, in Wisconsin, I met the son of the then President of Peru. If some of that stream of travel that has fertilized the Old World can be diverted to the south, it will be beneficial not only to the countries to which it is sent but to those who come in contact with the travelers on their return.

Especially would I like an school teacher to be sent. No one who travels abroad can fail to notice how many of our educators take advantage of the summer vacation for a trip to Europe. I hope I am not too optimistic when I say that when the Panama Canal is completed I believe that, in increasing numbers, these instructors will turn toward South America, and there become more intimately acquainted with the people who are represented here to-night. I have traveled through both Europe and South America, and while we find many things in Europe that interest, instruct, and delight, we find more that is helpful in the countries to the south. I will say, too, that visits to those countries are not without interest merely from the standpoint of the tourist.

Secretary Bryan then reviewed briefly his trip to South America, describing his visit to Peru, Bolivia, Chile, Argentina, Uruguay, and Brazil, and then continued and closed his speech as follows:

Your journey through these countries—I speak only of those countries of South America which I had an opportunity to visit—will be a continual delight, and when you come back you will feel that your time has not only not been wasted but that you are in a position to render a larger service to your country than you could have rendered had you not seen with your own eyes the development that has gone on thus far and learned of that which is to come.

We have been in the habit of regarding Panama and its canal solely from a commercial standpoint. I ask you to consider it from a higher standpoint. The Canal Zone ought to become a place of supreme importance—it ought to be the clearing house for Pan America. There the people of the Latin-speaking countries and the English-speaking Republic should meet; there they should become acquainted with each other; there they should learn of each other's customs, and enjoy that mutual contact that enables the people of one section to deal more intelligently with the other sections.

I desire to see the United States establish a great institution of learning at Panama, and collect in that institution the most prominent educators of the Spanish and Portuguese speaking Republics.

The youths of the southern countries could meet there—their instructors could mingle there and cement the friendship that will make us move forward side by side for the development of our hemisphere.

But it is not merely a sympathetic exchange on a commercial basis and on an intellectual level for which I plead. We need a comparison and exchange of ideals. The ideal is the only thing of value that can not be monopolized. It is our own fault if anyone has a higher ideal than ours, for his ideal can be ours if we will, and as the ideal is the most important thing that a man can possess, we can rejoice that this one thing of supreme value can pass from land to land without being vexed by custom laws or tariff rates. We need to learn of each other. They have experiences by which we will profit; we have had experiences that will be of advantage to them. Their constitutions are modeled after ours, and that which goes on here is intensely interesting to them, as that which goes on down there must be of extreme interest to us. I believe, therefore, that no matter from what standpoint we look at these subjects we must recognize that with a sympathetic interest in each other we can be helpful unto each other.

In the closing chapters of his French Revolution, Carlyle declared that thought was mightier than artillery parks, and that at least it would mold the world like soft clay; and then he added a truth even greater, namely, that back of thought is love.

There is no great thought that does not come from the heart. We have overestimated the brain's part and underestimated the heart's part in the shaping of human destiny. It is out of the heart that the issues of life come. As a man thinketh in his heart, so is he. It is a poor head that can not find a plausible excuse for doing what the heart wants to do. The heart, therefore, is the important thing and we can never deal with these people—we can not deal successfully with any people—unless back of our thought there is love. And why should we not be attached to these people? What people have paid us so high a compliment as they? They are, in a sense, the followers of our political aspirations. They have written their constitutions because our people wrote one before them, and they have honored us by making our Constitution largely their chart and their guide.

Nearly all the Republics of the world outside of ours are speaking the Latin tongue. These people deserve all our sympathy. Their affections are extended toward us and we are in duty bound to meet them and reciprocate the good will which they so strongly, so deeply feel. I am glad that I am associated officially with these gentlemen; I am honored by companionship with them. I speak for the President of the United States, as well as for myself, when I say that these men are not more earnestly interested in the development of the resources of their several nations and in the advancement of their countries in everything that pertains to civilization than are the people of this country who are connected with the Pan American Union and who are represented officially by our Director General—all of them will do what they can not only to improve day by day the relations between the countries, but to hasten the day when the only rivalry between us will be to see which Republic holds highest the light that will lead us all to higher ground.



FIFTH PAN AMERICAN CONFERENCE

ONE of the most important matters to be mentioned in this issue of the *BULLETIN* is the selection of Santiago, the capital of Chile, as the scene of the Fifth Pan American Conference, which will be held in the fall of 1914. At the meeting of the governing board of the Pan American Union which assembled on May 12, presided over by the chairman ex officio of the board, Hon. William Jennings Bryan, the Secretary of State of the United States, and attended by all the Latin American ambassadors and ministers in Washington, Santiago was unanimously selected as the meeting place of this great gathering. The motion for the choice of Santiago was made by the Argentine minister, Sr. Don Rómulo S. Naón and was seconded by the Brazilian ambassador, Sr. Domicio da Gama. The Venezuelan minister, Sr. Dr. P. Ezequiel Rojas, who was unable to attend the meeting, sent his vote in favor of Santiago in a cordial letter, while the Peruvian minister, Sr. Don Federico A. Pezet, who was unavoidably absent fulfilling an official engagement in New York City, telegraphed his earnest seconding of the motion. The chairman of the board made some appropriate observations congratulating the representatives of all the republics upon this cordial and unanimous action of the board and pointed it out as an indication of the good feeling existing among all the countries and their desire to act together. The Chilean minister, Señor Don Eduardo Suárez, in response used the following words:

The mark of friendship and esteem that every country that invades the resolution adopted by the governing board will certainly have the most profound appreciation in its Government as it has the will to consultation and understanding with respect to Washington.

It will be a pleasure and an honor for Chile to have at home the distinguished representatives of all the American Republics when working on behalf of common interest and mutual relations.

I have especially to thank the action of the Argentine minister in moving the selection of Santiago as the place of the conference, and I am sure that the Chilean Government will receive the most cordial and friendly and warmly.

I request, Mr. Secretary, to insert in the minutes of this session the expression of my sincere thanks to the Chilean Government.

Three committees were appointed to arrange the preliminary details for this conference, a committee on program, a committee on rules, and a committee on the Pan American Union. The committee on program consists of the representatives on the governing board from the following countries: United States, Brazil, Costa Rica, Salvador, Venezuela, Cuba, Argentina, Chile, and Peru; the com-

mittee on rules, the representatives from Bolivia, Nicaragua, Uruguay, Guatemala, Dominican Republic, Colombia, Honduras, Paraguay, and Mexico; the committee on the Pan American Union includes the members of the supervisory committee of the governing board of the Pan American Union, viz, the representatives from the United States, Cuba, Uruguay, Chile, and Honduras, together with those from Brazil, Argentina, Haiti, Ecuador, and Panama.

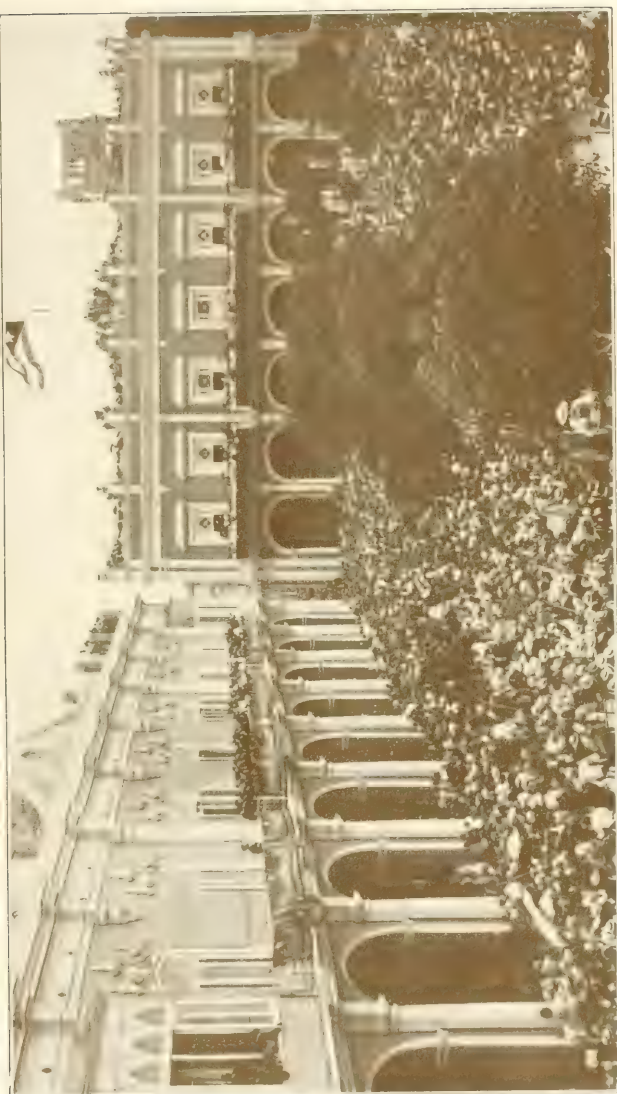
The director general and assistant director of the Pan American Union take advantage of this occasion to extend their sincerest felicitations to the minister of Chile, Señor Don Eduardo Suárez, on the selection of the capital of his country as the seat of the next Pan American Conference. Señor Suárez not only as a member of the governing board but as a member of the important supervisory committee has always taken the deepest interest in the welfare of the Pan American Union, and it gives the executive officers pleasure to see his wishes in this matter of the conference gratified.

NEW EXECUTIVES IN LATIN AMERICA.

During the month of May three of the Latin American countries have seen a change of their respective executives, Haiti, because of the sudden death of its President, and the other two, Bolivia and Cuba, by virtue of their constitutional provisions. On the 4th of May, 1913, the Congress of Haiti elected Senator Michel Oreste President of the Republic, to succeed the late Gen. Tancrede Auguste, whose demise occurred on the 2d of that month. The new Haitian Executive is a well-known scholar and linguist, a lawyer of renown, and one of the ablest public and political speakers in his country. Soon after being admitted to the bar he entered public life as a member of the Chamber of Deputies. He subsequently held the important office of Attorney General so successfully that he was elected Senator, serving in that capacity for two terms.

The new Bolivian executive is Sr. Don Ismael Montes, elected on May 8. This is the second time in his political life that Sr. Montes has been called upon to fill the highest office in his native country, having previously served as President during the term of 1905-1909. He has had an interesting career. As a soldier he has shown his bravery in defense of his country and attained the rank of colonel for important services in the field. Sr. Montes is also a well-known lawyer, and has filled many important offices, among them that of Minister of War and diplomatic representative of his country abroad.

Cuba's new president is Gen. Mario G. Menocal, who on the 20th of May last took the oath of office in Habana, succeeding Gen. José Miguel Gomez. Reference to Gen. Menocal's inauguration appears elsewhere in these columns.



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The BULLETIN desires to express the best wishes of the Pan American Union for the prosperity of Haiti, Bolivia, and Cuba, and the personal welfare of their honored Presidents.

INAUGURATION OF PRESIDENT MENOCAI.

The inauguration of Gen. Mario G. Menocal as President of Cuba on May 20 was an important event in the history of that country. Cuba, under his administration, should enter upon a new period of remarkable progress and prosperity. His own record in the past, his present views on important questions, and his capacity to lead the Cuban people make President Menocal the man of the hour. Cuba itself is one of the richest countries in the world. Its agricultural and commercial possibilities are already developed to a greater degree than the world generally appreciates and yet they permit of far greater development in the future under an administration such as President Menocal will give the country. The importance of his inauguration was recognized by President Wilson of the United States by the sending of a special mission to represent him. This mission included Hon. Dudley Field Malone, Third Assistant Secretary of State, and Brig. Gen. Enoch H. Crowder, United States Army, with Edward Bell, of the Latin American Division of the State Department, acting as secretary. The United States minister in Cuba, Hon. Arthur M. Beaupré, officiated as chief of the mission. An interesting feature of the correspondence of the Pan American Union is that of answering inquiries which come from the United States, South America, and Europe in regard to Cuba. These have increased greatly of late and there is prospect that under the administration of President Menocal the whole world will watch more closely than it ever has the welfare and progress of this remarkable country of the Caribbean. In this connection the executive officers of the Pan American Union express their best wishes to Señor Don Antonio Martín-Rivero, the retiring minister of Cuba to the United States and a member of the governing board, for continued success in his new duties as minister to Italy, and at the same time extend a cordial welcome to his successor, Señor Dr. Pablo Desvernine, the newly accredited minister to the United States.

VISIT TO UNITED STATES OF BRAZILIAN MINISTER OF FOREIGN AFFAIRS.

This issue of the MONTHLY BULLETIN goes to press too early to describe the arrival, reception, and stay in the United States of Dr. Lauro Müller, minister of foreign affairs of Brazil, who is returning the visit of Elihu Root, then Secretary of State, to Brazil and South America in 1906. In the last issue of the BULLETIN special reference



THE MINISTER OF FOREIGN AFFAIRS OF BRAZIL, DR. LAURO MULLA, ARRIVING AT THE HOTEL IN WASHINGTON, D.C., WEDNESDAY, JUNE 10, 1908.



DR. LAURO MULLA, MINISTER OF FOREIGN AFFAIRS OF BRAZIL, AT THE WASHINGTON HOTEL, WEDNESDAY, JUNE 10, 1908.

was made to the visit of this distinguished Brazilian including a brief review of his eminent career. At this writing Dr. Müller is due to arrive at Hampton Roads on the battleship *Minas Geraes*, of the Brazilian navy, on Tuesday, June 10, when he will be met by the Secretary of State; the Secretary of War; the Secretary of the Navy; the Brazilian ambassador; Dr. José Carlos Rodrigues; Mr. E. L. Chermont, counselor of the Brazilian embassy; Lieut. Commander Radler de Aquino, naval attaché; and Mr. J. F. de Barros Pimentel, second secretary of the Brazilian embassy; Senator Elihu Root; the Third Assistant Secretary of State; Gen. Erasmus M. Weaver, Chief of Coast Artillery; Director General John Barrett, of the Pan American Union; Lieut. Commander R. C. Bulmer, United States naval aid to Dr. Müller; Capt. Le Vert Coleman, United States Army aid to Dr. Müller; an attaché of the Department of State; and Mr. J. P. Tumulty, Secretary to the President. After various formalities and exchanges of calls, the party will proceed to Washington where they will remain until Sunday afternoon, June 15. In Washington Dr. Müller will be entertained at receptions, dinners, and luncheons by the President, the Secretary of State, the Secretary of War, the Brazilian ambassador, the staff of the Brazilian embassy, and the Director General of the Pan American Union. Visits will be made to Mount Vernon, Annapolis, and to the various public buildings of the Capital. From Washington the party will proceed to Bethlehem, Pa., to inspect the Bethlehem Steel Works, then to New York, where they will be entertained by the Pan American Society of the United States, the New York Chamber of Commerce, and the American Manufacturers' Export Association. They will then go to Boston and thence to Chicago and San Francisco, where Dr. Müller will select the site for the Brazilian buildings at the Panama-Pacific International Exposition. The party accompanying Dr. Lauro Müller, the ambassador of Brazil on special mission, includes Sr. R. Regis de Oliveira; Dr. Helio Lobo, secretary of the mission; Capt. Antonio Sampaio; Alberto de Ipanema Moreira, naval aid; Capt. Antonio da Fonseca, military attaché to the Brazilian embassy at Washington; Lieut. Euclides Hermes da Fonseca, military aid; Custodio Alves da Lima, private secretary to Dr. Müller; Maurice Nabuco, attaché of the mission; Thedín Costa, captain of the *Minas Geraes*; and Dr. Müller's son.

DR. JOSÉ CARLOS RODRIGUES, OF RIO DE JANEIRO.

One of the most distinguished Brazilians who has recently visited the United States is Dr. José Carlos Rodrigues, editor and proprietor of the *Jornal do Commercio*, one of the leading newspapers of Brazil



Portrait of Mr. [Name]

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and one of the great newspapers of the world. Dr. Rodrigues arrived in Washington early in June in order to be in this country with Dr. Lauro Müller, the Brazilian minister of foreign affairs, during the latter's presence in the United States returning the call of former Secretary of State Elihu Root to Brazil in 1906. Dr. Rodrigues is one of the foremost constructive men of Pan America and is a good friend of the Pan American Union. On Sunday, June 8, the Director General gave a luncheon in his honor in the Pan American Building, to which were invited to meet him the following guests: Sr. Domicio da Gama, ambassador of Brazil; Hon. John Bassett Moore, counselor of the State Department; Dr. R. Regis de Oliveira, Brazilian minister to Cuba; Thomas Nelson Page; Boaz W. Long, Chief of the Latin American Division, State Department; Francisco J. Yánes, Assistant Director of the Pan American Union; Charles Lyon Chandler, of the State Department; Theodore W. Noyes, editor of the Washington Star; Ira E. Bennett, editor of the Washington Post; Frank T. Codrington, editor of the Washington Herald; F. A. Walker, editor of the Washington Times; Stephen Bonsal; Arthur J. Dodge, chairman board of governors, National Press Club; Arthur Willert, of the London Times; J. C. Hemphill, of the Philadelphia Ledger; Sumner M. Curtis, of the Chicago Herald; Robert H. Patchin, of the New York Herald; David S. Barry, of the New York Commercial; Harry L. Dunlap, of the New York World; Elmer Murphy, of the New York Tribune; Dudley Harmon, of the New York Sun; Theodore H. Tiller, vice president National Press Club; Austin Cunningham, secretary National Press Club; Henry L. Sweinhart, of the Associated Press; John W. Clifton; Dr. Albert Hale, acting editor of the Pan American Bulletin; William V. Griffin, of the Pan American Union staff; E. Belfort Saraiva de Magalhaes, of the Pan American Union staff.

CHANGES IN GOVERNING BOARD OF PAN AMERICAN UNION.

The BULLETIN of the Pan American Union takes this occasion to express regret at the separation from its governing board of three of its honored members, Sr. Don Salvador Castrillo, minister of Nicaragua, Sr. Don Antonio Martín-Rivero, minister of Cuba, and Sr. Don Ramón M. Valdés, minister of Panama, who have been selected by their respective Governments to fill important diplomatic posts in Europe. Their places on the governing board will be filled by Gen. Emiliano Chamorro, Sr. Dr. Pablo Desvernine, and Sr. Don Eusebio Morales, respectively. To these new members the BULLETIN extends a hearty welcome, while wishing the parting diplomats greatest success in their new posts and expressing to them gratitude for the interest they manifested in the welfare of the Pan American Union.



Photograph by J. C. Smith

SENATOR GENERAL EMILIANO CHAMBEROS

Emiliano Chamorro, born in Mexico, 1850, died in 1900. He was a member of the National Congress of Mexico.

ADDRESS OF MINISTER OF ARGENTINA AT HARVARD.

On April 24, Dr. Rómulo S. Naón, the Argentine minister to the United States, and member of the governing board of the Pan American Union, delivered an interesting lecture on "Higher Education in the Argentine Republic" before Harvard University. He pointed out that the universities of his country have been most prominent factors in studying the geographical needs of South America and effecting the economic organization of the continent. He called attention to the fact that the University of Cordoba in Argentina was founded in 1613, 23 years before the founding of Harvard, and that the educational system of Argentina is centered about three universities --at Cordoba, Buenos Aires, and La Plata. The students of Harvard were indeed surprised and their admiration for Argentina was increased when he pointed out that the University of Buenos Aires had 7,500 students, or considerably more than Harvard. The various universities, the minister said, have produced most of the political, scientific, and commercial leaders of the country and are helping to settle the big agricultural and transportation problems.

HONORARY DEGREE FOR MINISTER OF URUGUAY.

The executive officers of the Pan American Union extend their congratulations to Sr. Dr. Carlos Maria de Pena, minister of Uruguay, upon the signal honor done him by New York University at its annual commencement on June 4, 1913. On that notable occasion this university, which is one of the most representative institutions of learning in the country, and which always is most conservative in the dispensing of its honors, conferred the degree of LL. D. upon Dr. de Pena. This was done not only in recognition of the minister's well-known scholarship and statesmanship shown through an extended and successful career in the public life of his country, but out of respect to Uruguay, which is making such remarkable progress in matters of education, government, and general material and social progress. Minister de Pena is the first Latin American to be honored with an honorary academic degree from that institution.

MR. CARNEGIE AND THE GOVERNING BOARD.

An unusual and interesting feature of the meeting of the governing board of the Pan American Union, which was held May 12, was the presence by special invitation of Mr. Andrew Carnegie. Being in Washington, he happened to call at the Pan American Building while the board was in session. This information was conveyed to the chairman, the Secretary of State of the United States, whereupon a motion was made by the minister of Costa Rica, Sr. Don Joaquin B.



SENATOR JAMES A. HARRISON

Calvo, and passed unanimously, that Mr. Carnegie should be invited to come to the meeting and take a seat at the board table. He accepted, and after the consideration of the regular business of the meeting made a few appropriate remarks, in which he emphasized how profoundly impressed he was with the fact that around this table gathered regularly the plenipotentiaries of the 21 nations of the Western Hemisphere, all working together for the welfare of each and all of the countries and for the development of peace and friendship among them.

A DISTINGUISHED CHILEAN.

One of the most prominent Latin Americans who has recently visited the United States is Senor R. H. de Ferari, president of the South American Steamship Co. (*Compañía Sud Americana de Vapores*). He is recognized as one of the foremost business men not only of Chile, but of all South America, and it was a pleasure for the staff of the Pan American Union to welcome him in a visit to Washington and to the Pan American Building. He also spent some time in New York and at other points of interest in the United States. Sr. Ferari is particularly interested in the opening of the Panama Canal and its effect upon trade between the west coast of South America, and especially Chile, with the United States and Europe. His company is planning to put on new vessels to ply between Valparaiso and New York City, and possibly other points in the United States as well as on the west coast of South America. His opinion, like that of most men who have thoroughly studied the situation, is that the opening of the canal will mark a great development in the commerce and trade of the whole of the west coast of South America from Panama south to the Strait of Magellan.

THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

It is gratifying to point out the special interest which the Governments, countries, and peoples of Latin America are taking in the Panama-Pacific International Exposition which will be held in San Francisco in 1915. From the date on which this exposition was determined upon the Director General has done everything in his power to interest the Governments forming the Union in this great celebration of the opening of the Panama Canal, and the response which they have made is evidence of their appreciation of the importance of the event and of the significance of the exposition. The Latin American ambassadors and ministers in Washington have made most favorable recommendations to their Governments for participation and many



Portrait of a man in a suit.

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of them have made or are planning to make visits to San Francisco in order to select the sites for their Government buildings and to make other preparations which may be necessary. If the countries of Europe and Asia show a corresponding interest in the exposition there will be no doubt of its extraordinary success from an international standpoint.

BOSTON CHAMBER OF COMMERCE IN SOUTH AMERICA.

Latest reports received by the Pan American Union from South America show that the special excursion of the Boston Chamber of Commerce to South America, encouraged and urged by the Director General of the Pan American Union, has been most cordially received at every port and city visited. The Latin Americans have maintained their remarkable reputation for hospitality and courtesy by the way they have treated these representative men of New England. There is no doubt that much good will result from this excursion, but it will not be complete in its effects unless it causes corresponding excursions to come from South American cities to Boston and the United States. All visits of this kind only reach their highest value when they are reciprocal in character and influence. One of the great points which the Director General urges in all of his correspondence and addresses in regard to Pan American trade relations is that the North American business man should think of building up the commerce of Latin America in the United States as well as extending the latter in the former.

MOBILE TRADE COMMISSION TO CENTRAL AMERICA.

The city of Mobile, Ala., and its Chamber of Commerce are to be congratulated upon having sent a special trade commission to Central American points. The president, William H. Ambrecht, of the chamber of commerce and its other officers, were in correspondence with the Pan American Union regarding this visit of its representative men to Central America and were urged by the Director General to direct its efforts in such ways and along such lines as would take into consideration the building up of the trade and welfare of Central America, as well as that of Mobile and the United States. With this purpose in mind the commission left Mobile on May 16 and returned about the middle of June. Among the points they visited were Belize, British Honduras; Livingston, Barrios, and Guatemala City, in Guatemala; Puerto Cortez, San Pedro, Tela, and Ceiba, in Honduras. The more visits of this kind are made the closer will relations of both friendship and trade develop between cities and sections of the United

States and the corresponding places of Latin America. It is to be hoped that the reciprocal idea in this matter and in this custom will be developed and that Central America may send a commission of its own to Mobile to return the visit. Mobile has added to its reputation as an up-to-date and enterprising city by backing this commission and has shown in sending it that it intends to get its share of the growing Pan American trade.

DEMISE OF PRESIDENT AUGUSTE.

The news of the sudden demise of Gen. Tanerède Auguste late President of Haiti, on May 2, 1913, was received with great sorrow at the Pan American Union. Gen. Auguste served only a short while, having been elected President in August, 1912 but during his incumbency he succeeded in gaining the good will of his fellow countrymen for his statesmanship and progressive policies. Upon learning of the lamented death of Gen. Auguste, the flag of Haiti and the pennant of the Pan American Union were both placed at half mast until after the funeral, as a token of respect to the dead statesman.

STEPHEN BONSAI'S "THE AMERICAN MEDITERRANEAN."

In view of the new problems and opportunities which are appearing in the countries surrounding the Caribbean Sea and in the light of the new development which must come to them as a result of the opening of the Panama Canal, there has been written up to the present time a no more interesting and instructive book than Stephen Bonsai's "The American Mediterranean." It not only gives, as it were, a bird's-eye view, but a most comprehensive impression of the conditions now existing and of probable eventualities in this section of the Western Hemisphere which is becoming more prominent every day as the canal approaches completion. The book is written in an interesting style, is attractively illustrated, and contains appendices, maps, and an index of much value. As it is understood that Mr. Bonsai is now preparing a corresponding book on South America, "The American Mediterranean" is sure to whet the appetite for another work on the countries lying south of the Caribbean.

LAKE MOHONK CONFERENCE ON INTERNATIONAL ARBITRATION.

The Nineteenth Annual Lake Mohonk Conference on International Arbitration was held at Mohonk Lake, Ulster County, State of New York, May 14-16, 1913, and was largely attended by the representative men from all over the country, including many foreigners of distinction. The fact that the annual dinner of the Pan American Society of the United States was held on the 15th prevented the



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THE UNIVERSITY OF CHICAGO

usual attendance of Latin American diplomats, and also that of the Director General, who had been invited to deliver an address. The principal discussion relating to Latin American took place on the afternoon of Wednesday, May 14, when William R. Shepherd, Ph. D., professor of history in Columbia University, read an important paper on the subject "Some Recent Forms of the Monroe Doctrine and Their Relation to International Arbitration." Prof. Shepherd is such an acknowledged authority on everything pertaining to Pan American affairs that any addresses of his upon questions that concern the relations of the United States with its sister Republics attract especial attention and are worthy of careful consideration. Other addresses which touched indirectly upon Pan America and which were an interesting feature of the program were those by Hon. Joseph R. Knowland, Member of Congress from California, who discussed "The Right of the United States to Control the Panama Canal"; by Emory R. Johnson, Ph. D., professor of transportation and commerce, University of Pennsylvania, and special commissioner on Panama Canal traffic and tolls, who spoke on "The Country's Interest in Tolls and Coastwise Shipping"; by Thomas Raeburn White, Esq., of the Philadelphia bar, who discussed "Should the Panama Tolls Question be Arbitrated?"; by Hon. Charlemagne Tower, former ambassador to Germany, who considered "The Treaty Obligations of the United States Relating to the Panama Canal"; and by Don C. Seitz, business manager of the New York World, who discussed general questions on Panama tolls and international arbitration. Special credit is due to Daniel Smiley, in whose name the invitations were issued, and H. C. Phillips, secretary of the conference, for its success.



PAN AMERICA IN THE MAGAZINES.

To South Peru and Arequipa is the second of the interesting series of articles written by Ernest Peixotto for Scribner's Magazine, which appears in the May number. The first of the series, entitled "Down the West Coast to Lima," appeared in the April number and was reviewed in the May issue of the MONTHLY BULLETIN. We



ILLUSTRATION BY SCRIBNER'S MAGAZINE.

THE CATHEDRAL AT AREQUIPA, PERU.

Where we asked ourselves, could we find such another combination, a great metropolitan cathedral fronting a monumental plaza and backed by two such mountain giants. (From "To South Peru and Arequipa," by Ernest Peixotto, in Scribner's Magazine for May, 1913.)

understand that these are the precursors to an extended series which, together with other material, will eventually be published in book form under the title "Pacific Shores from Panama."

In the May installment Mr. Peixotto takes the reader to Cerro Azul, the Peruvian port which takes its name from the bluish promontory near which it is located, and the several interesting excursions made from this place, the trip to Pisco, and the final visit



THE CHULI VALLEY, PERU. The town of Chuli, Peru, is situated in the Chuli valley, a lovely valley of the Chuli, hidden in the dreary Andean solitudes, and asked their commander to allow them to remain. His reply was, "Ari, quepai"; that in Quechua means "Yes, remain". From "To South Peru".

to Arequipa make up the gist of the story and lead the author to show his powers of graphic description at their best.

The author's first impressions of Cerro Azul seem to have been somewhat unfavorable, but after boarding the carrito—a little car running on a narrow-gauge track and drawn by a mule—and swinging around the hill the scene changed, and he describes it as follows:

There present the scene before us. The country, once desolate and changeless, is now transformed into a garden. The first desert transformed in a moment into sandy wastes to broad cotton fields and acres upon acres of sugar cane. A tall factory chimney loomed up in the distance; then a Japanese village with its temple set among the banana trees came into view; then a larger native village; and finally the low, rambling hacienda, an extensive group of buildings painted venetian red and inclosing two patios, one set out with date palms and a fountain, the other planted with flowers and entwined with honeysuckle. We were taken to large and airy rooms that faced the garden and tennis court, with, beyond, a fine prospect of the sea, calm, placid, and blue beyond belief.

The author was a guest at Santa Barbara, one of the largest of the Peruvian sugar plantations, of which he writes:

It was now only 9 in the morning (for we had made a very early start) and I spent the remaining hours until luncheon in walking through the sugar mill with my host. Santa Barbara is a very big plant, one of the largest on the west coast, and 35 miles of railroad track feed its capacious maw. Train load after train load of cane, the "honey of reeds," draws up to the factory each day to spill its contents upon the endless chains that dump it on to the crushing mills. Like all perfected machinery of this day, no human hand touches the product until the finished sugar, 150,000 pounds a day, is sewn into sacks and put on flat cars for shipment at the port.

After luncheon we started, four of us, in the carrito, for Casa Blanca, a large ranch some miles distant, the headquarters of the cultivation department. Here we found horses ready saddled and soon were riding off toward an isolated hill, the Cerro d'Oro, a barren peak bearing Inca ruins plainly visible upon its summit. As we climbed its sandy heights, beautiful views of the valley began to unfold themselves.

To the westward the sea glittered like silver in the afternoon light; to the north, parched and baked and blistered by eternal sunshine, the arid foothills lay seamed like wrinkled old mummies; but to the east, in violent contrast to this desolation, the broad Canete Valley, under the fecundating touch of its river and countless irrigating ditches, bloomed into verdant fields of cane, vivid, velvety, stretching like a vast green carpet to the far foothills that rose, pale, ashen, and sandy, to buttress the grand Cordillera towering high into the heavens.

Several interesting excursions to near-by ancient Inca ruins and other attractive places were made before leaving Cerro Azul for Pisco, where a day was spent very pleasantly. A short stay at Mollendo was also enjoyed, and then the author gives us the following graphic description of the scenic beauty of the trip from this place to Arequipa:

The road ascends by a series of loops and curves among rounded foothills, whose fat flanks are covered only with a tough-looking herb, dull brown and in spots green. Now and then we caught glimpses of one of those verdant valleys that lie tucked away from the coast. This scene passed in a sight, however, and at an elevation of

the phenomenon of the region. * * *

tinted mountains, stratified and shaded like those of the Grand Canyon of the Col-

... tinted mountains, stratified and shaded like those of the Grand Canyon of the Col-



AN ALPACOTA

At Vitor, where the women were selling delicious grapes by the station, we had reached an altitude of 5,000 feet, and soon could look across the broad upper plateau that now spread out before us. At a turn of the road in the distance Chachani and El Misti, the two Andean sentinels, suddenly stood revealed in all the glory of their icy summits nearly 20,000 feet above the level of the sea.

The scenery now became remarkable—grand. At times we looked into the valley of the Chili, with its verdant fields and Indian villages set in clusters of banana palms; at others into arid chasms, where the blue evening shadows were slowly creeping upward, while the coppery sunlight still flickered on the upper walls; and at each turn we obtained new views of the two mountain giants that marked our destination and that grew nearer and ever nearer, now rosy in the evening glow.

The short twilight had deepened. Ting's lights burst forth in the semidarkness and in 10 minutes we pulled into the station at Arequipa. The acting superintendent of the Southern Railways was there to greet us, and soon we were rattling with him, in the dark of the early evening, over the cobblestones to the hotel.

Suddenly we emerged into the plaza, and a moment later stepped out upon our porch, speechless at what lay before us. The great bell of the *Compañía* just opposite was tolling for vespers, and its deep bass voice was answered by the jangling but sweet-toned chimes of the other churches, and by the slow, irregular thud of the cathedral bell. We were standing on the top of the *Portales*, or stone arcades, beautiful in design, that completely surround the plaza on three of its sides. Below us lay flower-beds, palms, and broad curving pathways whose glistening tile pavements, clean as



Courtesy, U.S. Bureau of Geography

CHACANI AND EL MISTI.

At a turn of the road in the distance Chacani and El Misti, the two Andean sentinels, suddenly stood revealed in all the glory of their icy summits, nearly 20,000 feet above the sea. (Illustrating "To South Peru and Arequipa," by Ernest Peixotto, in *Scribner's Magazine* for May, 1913.)

mirrors, reflected the arc lights above. A quiet crowd was slowly moving about, for a military band was playing off in one corner.

Directly opposite loomed the long façade of the cathedral, above which we could faintly descry the shadowy form of Misti, rising to its snow-capped cone in all the perfect symmetry of its pure volcanic outline, contrasting with its rugged neighbor, Chachani, cut into a multitude of peaks and ice fields and rocky pinnacles. "Where," we asked ourselves, "could we find another such a combination, a great metropolitan cathedral fronting a monumental plaza and backed by two such mountain giants?"

And the spell of this first impression did not wear off. * * *

As we walked about the streets next morning we were struck by the pretty, gay aspect of the town and of its dwellings painted in pale pastel tones, rose, pale ocher,



orange, and lemon trees. (Illustrating "To South Peru and Arequipa," by Ernest Peixotto, in Scribner's Magazine for May, 1913.)

Nile green, and gently gray, but almost all blue—blues that shade in in faint, cool white to the deep tones of the azure sky. In the open courtyards oleanders bloomed and the tessellated tufa pavements were shaded by fig, orange, and lemon trees. * * *

It is the second city in size in Peru, and its founder, Garcia Manuel de Carvajal, called it *La Villa Hermosa*—the Beautiful City—and it well deserved its name. Its present appellation is *Quechua* in origin, and is said to have originated from the fact that a party of Inca soldiers once came upon this lovely valley of the Chili, hidden in the dreary Andean solitudes, and asked their commander to allow them to remain. His reply was "*Ari, quepai*," that in *Quechua* means "Yes, remain."

Its elevation, some 7,500 feet above the sea, gives it a delightful climate, quite springlike in character, and of its 40,000 inhabitants a large proportion are gente decente, for it has long been recognized as a center of culture and the residence of men of distinction.

The courtesy of the *Arequipeños* is beyond question. Each time you stop to look into a courtyard some one has a pretty way of asking you to come in and "take a seat." Then you are presented with flowers, and apologies are made that the season is late and flowers not what they were a month or two ago. And what pretty dark-eyed young women in lacy mantillas you meet coming home from church on Sunday morning.

The author then paints a pleasant picture of the delightful Sundays one spends in *Arequipa*, including an evening at the *zarzuela* or musical comedy, and closes with references to some of the picturesque corners of the city that interest the visitor, and the Harvard University Observatory which is located not far from the city itself, where the great photographic telescopes are mapping the heavens.

Excavations at Quirigua, Guatemala, by Sylvanus Griswold Morley, assistant director Quirigua Expedition, 1912, in the *National Geographic Magazine* for March, is an interesting archaeological study of Mayan civilization in the light of knowledge thrown on the subject by the recent systematic study of these ruins under the auspices of the School of American Archæology.

Mr. Morley is a thorough and careful student of American archæology and has written numerous interesting articles on Mayan antiquities, notably those on Chichén Itza and Uxmal contributed to the March and April, 1911, issues of the *BULLETIN* of the Pan American Union.

The excavation and thorough study of the ruins of Quirigua is a momentous work and, although but just begun, has already added materially to our knowledge of its ancient builders. The subject is of such great interest to students of American antiquities, not only in the United States but throughout the world, that we quote extensively from Mr. Morley's very able presentation thereof. In introducing his subject he writes:

The ruins of Quirigua are located in the Republic of Guatemala, Central America, 57 miles from the Caribbean Sea. The heart of this ancient city, its civic and religious

erected in its several courts and plazas, this ancient American metropolis was abandoned during the first half of the sixth century A. D.

Toward the close of the sixth century the Mayas moved out from the older centers of their civilization in the south and migrated northward into Yucatan. Here in the stress of colonizing a new and unfamiliar land the remembrance of their former homes gradually faded, until Quirigua, along with many another southern city, became only a memory, a tradition. Finally, long before the discovery of America, even the tradition of its former existence had passed from the minds of men.

Hernando Cortez, the conqueror of Mexico, must have passed within a few miles of Quirigua in 1525, on his memorable march to the Golfo Dulce, but he makes no mention of the fact, and it was not until over 300 years later, or in 1840, that the site was again made known to the world by Stephens and Catherwood.

During the centuries which had elapsed since its abandonment a dense tropical vegetation had overgrown the city, overthrowing its temples and palaces and reducing them to shapeless mounds of fallen masonry.

The jungle had won its way into the different courts and plazas, and these public squares, once teeming with the life of a populous community, had become the haunt of the tiger, peccary, monkey, anteater, and the infinite host of the tropical forest. The jungle had again reclaimed its own.

In 1909 the United Fruit Co., incidental to the purchase of a large tract of land in this vicinity for a banana plantation, acquired title to the site, and in the following year, through an arrangement with the School of American Archaeology, the systematic study of the ruins was undertaken under the direction of Edgar L. Hewett.

The author then enters into the details of the difficulties which presented themselves in the unearthing of the site covered by the jungle growth of centuries. Giant trees had grown in among the buried sculptured monuments and had to be removed with great care to prevent injury to these priceless treasures of antiquity; tons of earth and rock had to be removed; even a trestle and tramway had to be built to carry off the excavated material, and thus the preliminary work was necessarily slow and tedious. As the following paragraphs will show, however, gratifying results were obtained.

Surmounting the broad and spacious terrace which forms the southern side of the ruins, the excavator reached the remains of a very important construction.

Fragments of sculptured stone, human and grotesque heads, hands and feet, feather work and geometric forms, and parts of a hieroglyphic cornice strewed the ground on every side, and the first trenches brought to light much additional material of the same character.

As the work of excavation proceeded there gradually developed from this mound of earth and fallen stone the ground plan of what had originally been an imposing temple. The temple consisted of a series of seven rectangular chambers, symmetrically arranged, the three larger ones of which, those opening to the outside, are 14 feet long and about half as wide.

The four interior chambers, alternating with the preceding, are somewhat smaller, being only 9 feet long by 5 feet wide. The floors of the smaller chambers are in every



THE MONUMENT CALLED STELA K, QUIRIGUA, GUATEMALA

The hieroglyphic inscription shown on this monument records the date 9.18.15.0.0. (Ahaul : Yax of Maya chronology, or approximately 535 A. D.). Stela K was the last of the great monuments to be erected at Quirigua the following hotun, or five-year period (540 A. D.), being marked by the erection of Stela A. Illustrating "Excavations at Quirigua, Guatemala," by Sylvanus G. Morley, in *The National Geographic Magazine* for March, 1913.)

case a foot or a half higher than the flooring of the larger chamber, and when they are entered, and similarly, the floors of the larger chamber are a foot higher than the floors of the spaces doorways given, but the floors of the smaller chambers of the steps are sculptured with hieroglyphics. * * *

This larger middle chamber originally had three heads tenoned into its back wall at a height of $5\frac{1}{2}$ feet above the floor. This unusual feature of decoration doubtless indicates a chamber of corresponding importance, which its central position in the building further corroborates. Indeed, it is more than likely that this chamber of the tenoned heads was not only the chief sanctuary of this particular temple but of the whole city as well.

Very few interesting specimens of pottery and other articles of handiwork were found in the interior of these rooms. Two very fine flint spearheads, each over 6 inches in length, and some fragments of pottery showing a variety of pleasing shapes, were found in one of the smaller compartments, but the best specimens were found in the second building, called the palace. The structure of temple A conforms to the usual Maya type, and it is the hieroglyphic cornice that is of the greatest interest. The exterior of the temple is thus described by Mr. Morley:

The façade of temple A, like that of all Maya structures, was divided into two parts by a cornice which passed around all four sides of the building half way between the top and bottom.

In temple A this cornice was composed of a band of hieroglyphics which began at the northeastern corner and extended clear around the building. Below this cornice the façade was plain, being without sculptural decoration of any kind. This severe treatment of the lower panel offered a striking and effective contrast to the upper panel, which was composed of an elaborate mosaic of sculptured stones finished at the top with another cornice showing a leaf motive. * * *

The walls up to the hieroglyphic cornice are perfectly plain. At the left, where the inscription begins and where the sequence of the first 15 or 16 hieroglyphics is known, the cornice has now been restored to the position it originally occupied.

The hieroglyphic inscription presented on the exterior cornice and on the rises of the steps in the three exterior doorways of this temple is of unusual interest. The text on the cornice records the date 9. 19. 0. 0. 0. ; 9 Ahau, 19 Mol of Maya chronology, which corresponds approximately to the date 540 A. D.

This date doubtless indicates the time at which temple A was erected or at least dedicated. It marks the close of Katun 19 of cycle 9 of the Maya era¹ and is the latest of all dates yet discovered at Quirigua.

The first two hieroglyphics in the eastern doorway record the date 9 Ahau, 18 Mol, which is exactly 40 days in advance of the date presented on the outside. The third hieroglyphic in the middle doorway expresses this distance of 40 days, and the fifth and sixth hieroglyphics the date 9 Ahau, 18 Mol, recorded also on the cornice outside.

Finally, the seventh and eighth hieroglyphics in the western doorway declare that this day, 9 Ahau, 18 Mol, was at the end of Katun 19 of cycle 9, thus repeating the information given on the exterior of the building.

It will be seen from the foregoing that the only Maya hieroglyphics which have been deciphered up to the present time are those which deal with some phase of the calendar, such as day, month, or period, signs, and the like.

¹ Morley, *Quirigua*, p. 10.
Maya, civilization.

Indeed, all told, the meanings of not more than 50 different characters have been worked out, leaving in the neighborhood of 150 which are still indeterminate. These undeciphered hieroglyphics probably treat of the events which occurred on the corresponding dates; or, in other words, they probably deal with the subject matter of Maya history.

The building material used in the temple is sandstone, quarried from the foothills 2 miles west of the city, and probably transported thither on rafts during the rainy season, when the greater part of the valley is submerged by the overflow of the Montagua River. In this way the building material could be floated right up to the base of the temple substructure. The blocks were finished—that is, either sculptured or faced—as the occasion required, after they had been laid in the wall.

The other building excavated during the year is smaller than the temple and, according to Mr. Morley, was more of a dwelling place or palace. Its ground plan is irregular and the rooms are small and dark with only one exterior entrance. It is in the ruins of this building, however, that most of the specimens were found. Among these is an effigy vase which was broken into a score or more fragments, but which has since been almost completely restored. It is 7 inches in height and 3 inches in width at the top and the grotesque head which ornaments the front is said to be remarkable as an example of free-hand modeling, the features being rendered with a verisimilitude rarely encountered in any aboriginal art. The body of the vase is a rich cream or buff color while the eyes, earrings, fillet, and mouth of the figure are painted a dull bluish-white, the beard and fillet decorations being done in a rich shade of red.

From all the data so far obtained, Mr. Morley estimates that the smaller building antedated the temple, and that it was probably erected during the period 440–540 A. D.

Work on the ruins is to be continued, and further developments are awaited with much interest.

At the Mission of San Xavier is the title of Agnes C. Laut's contribution to the May number of *Travel*. Comparatively little has been written for the general reader concerning the heroism and martyrdom of the earliest of the Catholic missionaries in the great Southwest, and the story is full of pathos and of interest. All but one of the famous missions of Arizona have been allowed to fall to ruin, and that one is the old mission of San Xavier, of which Miss Laut writes:

It would be a mistake to say that San Xavier has been restored. Restoration implies innovation, and San Xavier stands to-day as it stood in the sixteen hundreds, when Father Kino, the famous mathematician and Jesuit from Bavaria, came wandering up from the missions of Lower California, preaching to the Yumas and Pimas of the hot, smoking hot, Gila Desert, and held mass in Casa Grande, the Great House, or "Garden of the Indian's Morning Glow." A lucky thing it is that restoration did not imply change in San Xavier, for the mission floats in the shimmering desert air of a plateau of the Tucson Mountains, unearthly, eerie, unreal, a thing of beauty and dreams rather than latter-day life; white as marble, twin towered, roof domed and

AT THE MISSION OF SAN XAVIER



THE MISSION OF SAN XAVIER

arched, the courtyard walls arched and pointed and, to the unaccustomed eye, so dazzling in the sunlight that somehow you know why rows of restful, drowsy palms were planted in line along the front of the wall.

Perhaps it is that it comes on you as such a complete surprise that makes it so strangely impressive. Perhaps it is the desert atmosphere in this cup of the mountains—blue and lavender and shimmering—that gives the effect of a white-domed vision floating in midair. You are motoring out from Tucson. To be sure, the narrow streets of the old Spanish quarters, with their patios and plazas, notify you that you are in an antique and foreign atmosphere; but all the other missions of the Southwest are adobe gray or earth color showing through a veneer of drab whitewash. You swing out from the city among the mountains—mountains that play tricks of mirage as you travel, receding and standing forth and crumpling themselves up in different shapes in the heat clouds. Then you meet Pima and Papago Indians driving to town with burro loads of firewood. Then suddenly you dip down in a valley and come up, and the thing swims in mid-air before you not a mile away—glare, dazzling, white, with a rocky knoll to the left, where you presently see a blue statue of the Virgin beneath a flower-decked grotto.

Is this America? You rub your eyes. There is the giant and century-old desert cactus, twisted and gnarled with age like the trees in Dante's *Inferno*, but with birds' nests in the pillared trunks, where little wrens peck through the bark for water. You look again. Indian women are molding pottery in front of their little square adobe houses; and the maidens are at the well drawing water; a horseman has just dismounted beneath the shade of a fine old twisted oak. But beyond the oak the vision is there—San Xavier del Bac, the most un-American thing in America, floating in mid-air, a vision of beauty and dreams. Then you swing round a bend in the road and pull up abreast of the rows of palms before the arched gateway. * * *

San Xavier, architecturally, is sheer delight to the eye. The style is almost pure Moorish. The yard walls are arched in harmony with the arched outline of the roof, and in the inner courtyard you will notice the Spanish lion at the intersection of all the roof arches. In front of the mission buildings is a walled space of some 60 by 40 feet, where the Indians used to assemble for the discussion of secular matters before worship. On the front wall in high relief are placed the arms of St. Francis of Assisi, and in the sacristy to the right of the altar you will find fine mural drawings and a painting of St. Ignatius. Thus San Xavier claims as her founders and patrons both Franciscan and Jesuit. This is easily explained. The Franciscans came up overland across the desert from the City of Mexico. The Jesuits came up inland from their mission on the Gulf of California. There can be no doubt that two lay brothers of the Franciscan order were in this region as early as 1538, at a period when, let us say, Jacques Cartier was still exploring the St. Lawrence. But there is also no doubt that Father Kino, the Jesuit from a Bavarian university, was the first missionary to hold services among the Pimas and Papagoes; and if he did not lay the foundations of San Xavier, then they were laid by his immediate successors. The escutcheon of the Franciscan on the wall is a twisted cord and a cross on which are nailed the arm of the Christ and the arm of St. Francis. The Christ arm is bare. The Franciscan arm is covered.

Unlike the missions built of adobe, San Xavier is of stone and brick. It is 100 by 30 feet. The transept on each side of the nave runs out 21 feet square. The roof above the nave is supported by groined arches from door to altar. The cupola above the altar is 50 feet to the dome. The other vaults are only 30 feet high. The windows are far up in the clear story, and set so deeply in the casement that the light falling on the mural paintings and fresco work is sifted and softened. Practically all the walls, the cupola, dome, transept, and nave, are covered with mural paintings. There is the coming of the Spirit to the Disciples. There is the Last Supper. There is the Lady



of Sorrows at the Foot of the Cross. There is the Conception. There is the Rosary. There is the Hidden Life of the Lord.

The main altar was evidently constructed by the Jesuits, for the statue of St. Francis Xavier stands below the Virgin between figures of St. Peter and St. Paul and God the Creator. On the arches of the dome are figures of the wise men, the flight to Egypt, the shepherds, the annunciation. Gilded arabesques colored in Moorish shell tints adorn the main altar. Statues of the saints stand in the alcoves and niches of the pillars and vaults. In the sacristy to the right of the altar is a large mural painting; and in the baptistry to the left of the main door is a fine large brass fount. Two small doors lead up to the towers from the main door. Look well at these doors and stairways. Not a nail has been driven. The doors are mortised of solid pieces with latched bars carved until they look like Damascus swords. The stairs to the towers are cut right through the thickness of the walls, the width of a man's shoulders, with cedar and juniper shakes set in the mortar for steps. The first flight leads to the choir. Around the choir are more mural paintings. Two more twists of the winding stair, and you are in the belfry. * * *

Pause for a moment and look out. The mountains shimmer in their mists. The sunlight sleeps against the adobe walls of the scattered Indian houses. You can hear the drone of the children from the schoolrooms behind the mission. You can see the mortuary chapel down to the right; the lions garlant supporting the arches of the roof of the main building. Father Kino was a famous European scholar and gentleman. He threw aside scholarship. He threw aside comfort. He threw aside fame, and he came to found a mission amid Arabs of the American Desert. The hands that wrought these paintings on the walls were not the hands of bunglers. They were the hands of artists, who wrought in love and devotion. Three times San Xavier was dyed in martyr blood by Indian revolt—in the sixteen eighties, in the sixteen nineties, and in the early part of the seventeenth hundreds. Priests whose names even have been lost in the chronicles were murdered on the altars here, thrown down the stairs, cut to pieces in their own mission yard. Before death, which they coveted as glory, what a life they must have led! To Tucson Mission was 9 miles, but to Tumacacori was 80; to Old Mexico, 900. Occasionally they had an escort of 12 soldiers for these long trips, but the soldiers' vices made so much trouble for the holy fathers that the missionaries preferred to travel alone or with only a lay brother. Sandaled missionaries tramped the cactus deserts in June, when the heat was at its height, and they traversed the mountains when winter snows filled all the passes. They have not even left annals of their hardships. You know that in such a year Father Kino tramped from the Gulf of California to the Gila, and from the Gila to the Rio Grande, and proved that Lower California was not an island. You know that in such another year 19 priests were slain in one day. On such another date a missionary was thrown over a precipice or slain on the high altar of San Xavier. And always the priests opposed the outrages of the soldiery, the injustice of the ruling rings. * * *

Now remember that the priests who did all this were men who had been artists, who had been scholars, who had been court favorites of Europe. Father Kino was himself of the royal house of Bavaria. But jealousy left the missions unprotected by the soldiers. Soldier vices roused the Indians to fury, and the priests were the first to fall victims.

Go across the Moki Desert. You will find peach orchards planted by the friars, but you can not find the graves of the dead priests. We considered the Apaches a dangerous tribe as late as 1880, but in 1686, in 1687, and in 1690 Father Kino crossed Apache land alone. I can not find any record of the Spanish missions at this period ever receiving more than \$15,000 a year for their support. Ordinarily a missionary's salary was about \$150 a year. Out of that, if he employed soldiers, he must pay the soldiers' wages and keep.

BOOK NOTES

LEADING FACTS IN NEW MEXICO HISTORY. By JOHN H. COVINGTON.
The New Mexico Historical Society. Volume II. Albuquerque, N. Mex.,
and Texas: The Torch Press, 1906. Republication of the first edition,
given by this society during the year 1897. Mr. Covington's contribution
to the history of the Southwest has been long known. His work in the
past time see Bulletin of the Pan American Union, March, 1902, was
the beginning of last year. It is a volume which will merit a well-
merited reward to the author, while at the same time flood with a clearer light many
of the hazy periods of the very early history of the great Southwest. The organic
association with which New Mexico was bound to Spain during the colonial days
has been brought out, and rest of the book centers about the Spanish period.
first clear analysis. As the author says in the preface to this second volume—"every
available source book and manuscript has been used, and the information therein
contained appropriated wherever necessary to the concrete chronological arrangement
of the leading facts of southwestern history." He modestly adds that the result is a
compilation and that no claim to authorship has * * * been asserted. But in
fact the book is more; it really is history, and without further argument it need
or another, it presents the logical series of happenings from which the reader is to
draw his own conclusions. Such chapters as dealing with the old "Santa Fe Trail,"
and that in which a description of the outpost city and capital of Santa Fe is given are
thoroughly historical, and while many authorities are cited or even quoted, the genius
of the author makes them over into real literature. As strong efforts are being made
by the Daughters of the American Revolution to restore and to keep for a permanent
highway the historical "Santa Fe Trail," this book, a real contribution to history,
ought to be sent to all attention to the value which would be gained thereby. A B.

DISCOVERIES IN SOUTH AMERICA AND THE WEST INDIES. By A. W. Wheeler. (Privately printed by the author.) As the preface states, no claim is made to be the first discoverers of that part of the world, but, it is added, we discovered many things which the early navigators did not see. The party making the trip passed along the east coast (Brazil), across Argentina to Valparaiso, down the west coast and through Magellan Strait, back along Brazil to the West Indies. The various divisions are somewhat in the form of letters to friends at home, and have as an object the desire to extend the pleasure to others of making these trips. Certainly the author's enthusiasm is sincere, and readers of these chatty paragraphs will undoubtedly wish to repeat, in actual experience, the pleasure herein expressed. It is to be regretted that the author did not submit the Spanish words in the text to a proof reader experienced in Spanish, for in that case several mistakes in spelling would have been avoided.

PANAMA.—It is only natural that with the vital and still growing interest the entire world takes in the problem of the Panama Canal and the work of piercing that isthmus, the number of books on Panama should increase. Many have already been written, and several new works appearing within the last few months have just been added to the shelves of the libraries. The *Panama Canal*, by J. B. Lippincott Co., Philadelphia and London, 1912. Price, \$1.25. In all there are XXVIII pictures, reproductions of a series of lithographs made by the author on the Isthmus of Panama, January-March, 1912. They are immensely attractive, and give a lifelike character to the

views selected, which carry the observer far beyond the colder impressions of a photograph. By no means of lesser merit are the notes of the author explaining each picture, for they do explain, and at the same time they convey a delicate sense of humor, which suggests the author's personality quite as much as do the illustrations.

The Story of Panama. *The New Route to India.* By Frank A. Gause and Charles Carl Carr. Silver, Burdett & Co., Boston, New York, and Chicago. 290 pages, profusely illustrated. Price, \$1.50. The authors are both officials on the teaching staff of the Canal Zone, and have had unusual opportunity to get at the



COURTESY SILVER, BURDETT & CO.

CHRISTOPHER COLUMBUS.

From a painting by Des Plomb, property of the Metropolitan Museum of Art, New York, illustrating the *Story of Panama*.

essential features and facts of canal work, as well as to study the varying factors that have gone to make that fascinating record of Panama history. There are two parts to the book—the first dealing with canal making, the second with the canal country. Each part shows careful preparation and can be taken as authoritative.—**Panama and What it Means.** By John Foster Fraser. Cassell & Co., London and New York. 1913. With a map and 48 illustrations. 291 pages, 12mo. Price, \$1.75. This is the result of a study of the canal through English eyes, and a carefully prepared study, favorable in the main to what has been accomplished and to what is to be expected

where the passage is open to the public. The complete guide is a small volume, with abundant pictures and maps, and gives that which is the most useful to the tourist. This is a good reading guide. **The Panama Guide.** By J. M. O'Connell. Published in America by J. C. O'Connell, Queen's Hotel, Panama, Canal Zone, 1912. A printed prospectus, containing all the questions asked on the canal, in which official authorities are chiefly quoted. There is a practical index, and a large list of references, and the book is a valuable guide to the tourist on the spot. **Panama. A Textbook on the Canal, Zone, and Republic.** With a Guide to the Pacific Coast and Panama. By Charles W. Burriss (published by the author, September, 1912, Kansas City, U. S. A.). Price, \$1. A useful book, packed with facts about the canal, life in the Tropics, steamer experiences, and data on the Republics north of the Isthmus. A Spanish vocabulary is



included. **THE PANAMA GUIDE.** By J. M. O'Connell. Published in America by J. C. O'Connell, Queen's Hotel, Panama, Canal Zone, 1912. A printed prospectus, containing all the questions asked on the canal, in which official authorities are chiefly quoted. There is a practical index, and a large list of references, and the book is a valuable guide to the tourist on the spot.

Isthmian Tourists' Guide and Business Directory. 1912-13. Published by the Isthmian Guide & Directory Co., American Canal Zone. Price, \$1.50. A large and semi-official directory of the Canal Zone, as well as of the Republic, including, therefore, the organization of the National Government. Much of the contents are given to classified advertisements, which are in themselves valuable, but there is a condensed descriptive section at the back, which gives a satisfactory idea of the canal, the Zone, the Republic, and the Isthmus. **Autour de L'Isthme de Panama.** (Concerning the Isthmus of Panama. International Questions of the Day.) By Joseph Justin. Imprimerie H. Amblard, Port au Prince, Haiti, 1913. Price, 1 franc.

has prepared for French readers, and more particularly those in his own Haiti, a short description—43 pages, in French of the canal and of the various phases in commercial activity which will be brought about by the opening of the canal. As Haiti is so close to the trade routes sure to be developed by connection of the two oceans across the Isthmus, M. Justin is trying to arouse his people to the necessity of making due preparation for the changes that must affect them.

SUGAR. The production of sugar is essentially one of the great industries of the world, and much of the product consumed comes from areas embraced in or controlled by America. The United States, Cuba, Dominican Republic, and Haiti, together with other Antilles, Mexico, Brazil, Peru, Venezuela, Argentina, Colombia, Ecuador, and all of Central America with Panama, produce sugar. No country in Latin America is without soil and climate suitable for sugar, although it is at present grown only for the most restricted local consumption. The subject is therefore most interesting, and the Library is constantly consulted for the latest information concerning sugar. These volumes have recently been added to the shelves.—**The World's Cane-Sugar Industry, Past and Present.** By H. C. Prinsen Geelings, of the Experiment Station, Pekalongan, Java. Norman Rodger, Altringham (Manchester). The latest date of issue is 1912, the earliest issue, a much smaller book, having appeared in 1910. The price is given at 10 shillings—\$2 50—. This has been called by technical students of the subject the best treatise on "Sugar," and is undoubtedly the reference guide to the industrial world of sugar. There are two parts—the history and description of the sugar industry down to the introduction of the "continental system" (1806), and the history of cane sugar subsequent to that date. The second division is by far the larger of the two. Practically nothing is said of the beet-root sugar, although its production is included in sugar tables. Statistics play a large part in the book, and a special feature is the comprehensive display of maps of many countries with their relation to sugar areas and possibilities. The book is sent to the Library by the courtesy of Mr. Norman Rodger, who publishes chiefly for the sugar industry.—**Sugar at a Glance.** (Prepared by Truman G. Palmer, Charts and data, Washington, 1912, Senate Document No. 890. Sixty-second Congress, second session.) Contains a series of charts, 42 in all, giving graphic illustrations of the past and present condition of both cane and beet sugar in all its phases. There is, besides, abundant text, some of it explanatory of the charts and some presenting data touching separate details on the subject of sugar. Several photographs are added, and there are apt quotations from German agricultural authorities. **Sugar, Cane and Beet.** An Object Lesson, by George Martineau, C. B. Isaac Pitman & Sons, 2-6 West Forty-fifth Street, New York. This is one of Pitman's Common Commodities of Commerce, a handy volume series of booklets aiming to present in attractive form and style the story of the world's great products. This on sugar covers 158 pages, has numerous illustrations, and a world's map showing the area over which sugar is cultivated. The whole subject is divided into XII chapters with IV appendixes, during which in a popular way the reader is pleasantly told all about the subject. The price of each volume is 1s. 6d., net.

COFFEE, OIL, SILK, are others in this same series of Common Commodities of Commerce published by Isaac Pitman & Sons, 2-6 West Forty-fifth Street, New York. They all restrict the discussion of the subject to about 125 pages and are nicely illustrated for the purpose of presenting a general picture on the industry. The untechnical reader is sought, not the scientific student nor the expert in the commercial or industrial sense. The price of each is 1s. 6d. Undoubtedly they will be of general purpose in school and general reading libraries.

(Reviews by A. H.)

SUBJECT MATTER OF CONSULAR REPORTS

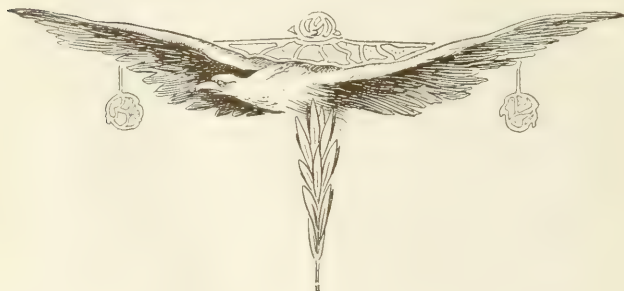
REPORTS RECEIVED UP TO MAY 5, 1913.

These reports are prepared by the consular agents of the United States in the various countries of the Pan American Union as likely to be of service to this institution.

ARGENTINA.		
News paper, La Nación sobre Ferrocarriles.....	Mar. 26	Do
News paper, La Opinion.....	Mar. 26	Do
Imports of automobiles.....	Mar. 26	Do
News paper, La Opinion sobre el comercio.....	Mar. 26	Do
News and trade papers.....	Mar. 26	Sario
Annual report on commerce and industry, Rosario.....	Mar. 27	Robert T. Crane, consul, Rosario, Buenos Aires
News paper, La Opinion.....	Mar. 26	Do
BAHIA.		
Imports of automobiles, 1910-1912.....	Mar. 26	Julius G. Lay, consul gen.
Market for railway equipment and supplies.....	Mar. 26	D. R. Birch, consul, Bahia
American telephones in Bahia.....	Apr. 9	Do
BAHIA.		
News and trade papers.....	Mar. 26	Do
Salt.....	Mar. 26	Do
BARAGOA.		
Knitted goods.....	Mar. 26	Dean R. Wood, consular agent, Nuevitas
Banana industry in Cuba.....	Mar. 26	Arthur Field Landley, consular agent, Baracoa
COLUMBIA.		
Trade Notes: Electric light and water works—Moving pictures—Railroad betterment—Railroad projects—Reinforced concrete building—Hippodrome—Bananas—Parcels post.....	Mar. 26	Do
Exports of cocoa beans and honey, 1912.....	Mar. 26	Do
COSTA RICA.		
Notes: Cold storage plant in Guayaquil—Electric plant at Curaray—Public works at Curaray—New telephone system at Guayaquil—Electric light for Cuenca—Public works in city of Quito—Shortage in cocoa crop.....	Mar. 29	Charles Baker, vice and dep. consul
Little market for motorcycles.....	Mar. 29	Do
Little market for saddle trees.....	Mar. 29	Do
Little market for stoves.....	Mar. 29	Do
Watch and clock market—List of dealers—Imports for 1909-10.....	Mar. 29	Charles Baker, vice and dep. consul
GUATEMALA.		
Shortage in cocoa crop.....	Apr. 5	Do
Seals for milk bottles (no market).....	Apr. 10	Do
Windmills and pumps, etc.....	Apr. 15	Do
HONDURAS.		
Automobiles and roads.....	Apr. 7	Do
Market for milk bottles.....	Apr. 7	Do

Reports received up to May 5, 1913. Continued.

Title	Date.	Author.
MEXICO		
Fishing tackle (no market)...	Feb. 15	Geo. A. Wiswall, consular agent, Camaguey
Gasoline lighting and heating appliances...	do.....	Do
Tiger cat and leopard skins (little market)...	Feb. 18	Marion Letcher, consul, Chihuahua.
Folding paper boxes (no market).....	Feb. 20	Gaston Schmutz, consul, Progreso.
Annual report for year 1912.....	Undated.	Thos. D. Edwards, consul, Ciudad Juarez.
Raffia fiber (palm from which this fiber is made does not grow in Chihuahua).....	Feb. 25	Marion Letcher, consul, Chihuahua.
Electric current in Chihuahua.....	do.....	Do.
Tiger and leopard skins (no market).....	Mar. 1	W. T. Gracey, consul, Progreso.
Watches and clocks (little market).....	Mar. 4	Lucien N. Sullivan, consul, La Paz.
New steamer service for Ensenada.....	Mar. 10	Claude E. Guyant, consul, at Salina Cruz, acting as vice consul at Ensenada.
Fishing tackle (little market).....	Apr. 4	Theodore Jones, consular agent, Campeche.
Hemp-seed, in market at Yucatan ..	Apr. 12	Wilbur T. Gracey, consul, Progreso.
PANAMA		
Cast iron soil pipe and fittings.....	Mar. 4	Alban G. Snyder, consul general, Panama.
Annual report of commerce and industries for year 1912...	Apr. 6	Do.
Law 13, of 1913, on public registration.....	Apr. 10	Do.
PERU		
Annual report of commerce and industries for year 1912.....	Mar. 29	Louis G. Drexler, vice consul, Callao.
Trade in watches and clocks in Peru (dealers in Callao).	Apr. 1	Do.
Peru's imports and exports of hides and skins for 1911...	Apr. 4	Do.
Summary of the quarterly export return from Callao....	do	Do.
URUGUAY		
Importation of jewels. Law of Feb. 10, 1913, establishing new appraisements.	Mar. 14	Fredene W. Goetz, consul, Montevideo.



ARGENTINE REPUBLIC

In 1912 the EXPORTS OF LIVESTOCK from the Argentine Republic were valued at 10,964,657 Argentine gold pesos, or 1,594,509 gold pesos more than in 1911. (Gold peso \$6.965 U. S. cur.) These exports were made up of 261,416 head of cattle, 104,898 sheep, 33,114 mules and asses, 12,549 horses, 969 llamas, 9 dogs and 7 goats. The TRAMWAY under construction from Buenos Aires to El Tigre has passed into the hands of the Lacroze company of the Federal capital. According to the terms of the concession this tramway is to be completed before August 1 of the present year.—The POPULATION of the municipality of Buenos Aires at the beginning of March of the present year was 1,439,528 inhabitants as compared with 1,369,286 on the same date of the previous year.—The 14th of March, 1913, was the fiftieth anniversary of the founding of the NATIONAL COLLEGE of Buenos Aires. The receipts of the ARGENTINE RAILWAYS during the first nine months of the present fiscal year amounted to £17,005,617 as compared with £13,085,167 during the same period of the fiscal year 1911-12.—The 14 BARRACKS now being constructed in the different military divisions of the country in accordance with a Federal law are well under way and some of them will probably be completed before the close of the present year. The buildings being erected at Tucuman and other points for this purpose are substantial and appropriate and are being built in conformity with the most approved methods of modern hygiene.—The ad referendum SANITARY CONVENTION, signed in Rome on August 17, 1912, between the representatives of the Governments of Italy and Argentina, was ratified by the Argentine Congress on February 26, 1913.—A recent executive decree makes the port of CELINA an authorized port for the shipment of grain.—An interesting feature of the exhibit of the Argentine Government at the International EXPOSITION OF GHENT is a large wall map of the city of Buenos Aires and suburbs prepared by the geographic section of the department of war. A CONFERENCE OF GOVERNORS of the Federal territories was recently held in Buenos Aires for the purpose of discussing problems of government connected with the territories, their settlement and development.—In 1912 there were 3,163 kilometers of NEW RAILWAYS opened to traffic in the Argentine Republic, making the entire railroad system of the country 31,749 kilometers at the beginning of the present year. It is estimated that railway construction in Argentina in 1913 will be even more active than it was during the past year. Some of the construction work planned and under way for the present year is as

follows: A central Argentine branch from Las Rosas to Villamaria, a distance of about 100 kilometers; a railway constructed by James Craik from Villa de Rosario, 74 kilometers, and from Las Rosas to Villamaria, about 207 kilometers; a section from Cruz to Cordoba, 349 kilometers, and the branch to San Jose, 16 kilometers; a branch from Salto to Rio Cuarto, near Rio Tercero. An important work planned to be completed in 1913 by the Argentine Central Railway is a double track between Villa Ballester and Rosario, a distance of 282 kilometers. The Southern Railway is constructing a number of branches. Work is being actively pushed on the Neuquen line to the Chilean boundary. The Northeastern Argentine Railway is constructing a branch from Concordia to Concepcion, Uruguay. Work on the Lerma Valley to Huatiquina Railway is actively being pushed forward in the neighborhood of the boundary with Chile. Work on the Rosario to Mendoza narrow gauge railway, covering a distance of 800 kilometers, is expected to be finished during the latter part of the present year. A trial shipment of FRUITS from the Province of Mendoza to New York was made in March last. Fruits of the finest quality are grown in that Province and come into season at a time when the highest prices obtain in American and European markets. A few years ago a successful exhibit of Argentine fruits was made in London, and as a result a small but select trade has been developed in the British markets. The area in Argentina for the cultivation of pomes and small fruits is very large, and inasmuch as good foreign and domestic markets are at hand fine opportunities exist for the development of fruit growing in the republic.—

The DEPARTMENT OF JACHAL, with an area of 23,000 square kilometers, has only about 45,000 hectares of land under irrigation. Of this irrigated area the principal crops are alfalfa, wheat, corn, and grapes. Alfalfa grows luxuriantly and cereals and fruits give abundant yields. Stock raising is carried on profitably, and silver, copper, iron, lead, and coal mining could be largely developed in the mountainous regions of the department. Statistics compiled by the department of agriculture of the Argentine Republic show that in 1912 the production of WINE in the Province of Mendoza aggregated 4,083,459 hectoliters, valued at more than 79,000,000 pesos. In 1912 there were 2,902 vineyards in Argentina, 1,130 of which were in the Province of Mendoza. The total annual production of wine in the Argentine Republic is estimated at 51 liters per inhabitant.—

The AGRICULTURAL SCHOOL at Puerta de Diaz, in the Province of Salta, is experimenting with the cultivation of different varieties of tobacco, 35,000 plants having been used for this purpose. The results of the experiments will be given to the tobacco growers of the country for their guidance in the cultivation of this plant for commercial purposes.

BOLIVIA

It is estimated that in 1912 there were more than £6,000,000 of **BRITISH CAPITAL** invested in Bolivian railways. In addition to this, there are also large English investments in mines and other industries in the Republic. The French have probably less than £3,000,000 invested in different enterprises in Bolivia, while the German investments throughout the Republic will scarcely reach £1,000,000.—During the latter part of March last bids were received by Orenstein & Koppel, of Huanuni, Bolivia, for the construction of the Machacomarca-Huanuni section of the Machacomarca-Uncia RAILWAY. These bids included grading, cuts, bridges, culverts, masonry, buildings, etc., and bidders were required to deposit £8,000 as a guarantee for the faithful performance of the work, the deposits of unsuccessful bidders to be returned to them.—The **MEDICAL COMMITTEE** appointed by the Federal Government to represent Bolivia in the study of tropical pathology at Rio de Janeiro, Brazil, is composed of Drs. Julio Quintanilla and Felix Veintemillas S.—The **MUNICIPAL BUDGET** of the city of Oruro for the year 1913 amounts to 888,871 bolivianos made up of the following items: Regular budget, 517,747 bolivianos, extra budget, 325,581, and public instruction budget, 45,543. The municipal council of Oruro has planned to carry into effect a number of important improvements during the present year.—The department of public works of the Government of Bolivia has been petitioned to grant a 10-year **FISHING CONCESSION** for the exploitation of the fishing industry in Lake Titicaca.—The first section of the **COCHABAMBA TRAMWAY** has been opened to traffic by the electric light and power company of that place.—The export duties on tin in 1912 amounted to, in round numbers, 2,700,000 bolivianos. It is estimated that these duties in 1913 will be considerably in excess of the amount referred to.—The National Bank of Bolivia has been authorized to close the offices of the Industrial Bank of the Federal capital, Oruro and Cochabamba in order that these offices may fuse with the National Bank.—Señor Ignacio Calderon, minister of Bolivia at Washington, has kindly furnished the **MONTHLY BULLETIN** with a table showing the **EXPORTS** from the port of San Francisco, Cal., to Bolivia during the first quarter of 1913. The shipments during the period referred to consisted of 100,913 packages weighing 3,911,402 kilos valued at \$147,016.16. This merchandise, classified according to value, is as follows: Flour, \$108,592.05; machinery, \$21,973.73; lumber, \$9,382.71; groceries, \$6,914.92; and miscellaneous articles, \$152.75. Of these shipments goods to the value of

\$90,233.72 entered Bolivia via Mollendo, Peru; \$33,925.71 via Antofagasta, Chile; and \$22,856.73 via Arica, Chile. — The Arica to La Paz Railway has reduced the established FREIGHT TARIFF 50 per cent on ores from the Corocoro mining zone consigned to Arica and 50 per cent on coal. The railway company is considering the advisability of reducing the freight rate on petroleum. These reductions were brought about through negotiations of the department of public works of the Government of Bolivia with the railway company. — Sr. Joaquin de Lemoine, CONSUL of Bolivia in Belgium represented the Bolivian Government at the statistical congress which met in Brussels in April last. — According to press reports the section of the Oruro to Cochabamba RAILWAY as far as Chuimani was opened to public traffic in April last. The general bureau of telegraphs of the Government of Bolivia has made a favorable report on the Telefunken apparatus for use of the military WIRELESS telegraph stations of the Bolivian Government. — On November 19, 1912, the Congress of Bolivia enacted a law, which was duly promulgated by the President of the Republic on December 2, 1912, providing for the appointment of a CUSTOMS COMMISSION, consisting of the director general of customs, the chief of the central office of inspectors (Vistas), an inspector to be appointed by the Government, and a commercial expert recommended by the board of trade of La Paz, to compile a customs importation tariff in harmony with the needs of the country. The work of the commission is to be submitted to the Congress on August 6, 1913, and if it receives the approval of that body is to become operative on January 1, 1914. The commission will work in cooperation with the boards of trade of the country, requesting data from them concerning the changes they think should be made in the tariff. The sum of 20,000 bolivianos has been appropriated to pay the expenses of the commission.



BRAZIL

The subinspector general of navigation has recently presented to the minister of ways (Viação) a TABLE COMPARING THE MOVEMENT OF CARGOES AND PASSENGERS of the navigation lines on the Amazon River and its tributaries, including the ocean branch to the Oyapoch River, as recorded by the Amazon River Steam Navigation Co. during the last trimester of 1912, and of the corresponding period of the year 1910 under the Amazon Steam Navigation Co. The comparison shows the enormous development that has taken place in fluvial (Amazonian) navigation since the signing of the contract on August 31, 1911, under which the new

service was inaugurated on September 17 of that year. During that last trimester of 1910, 30 round trips were made, covering a distance of 58,877 miles, and carrying 2,833 passengers (both first and third class) and 3,184 tons of freight, yielding a total revenue of 351,842\$451 (1\$000 = 32 cents gold). In the last trimester of 1912, 47 round trips were made, covering a distance of 92,566 miles, and carrying 5,413 passengers (both first and third class) and 6,256 tons of freight, yielding a total revenue of 958,706\$970. The gain has been, therefore, in round trips, 17; in miles traveled, 33,689; in passengers carried, 2,833; in tons of freight carried, 3,072; and in revenue, 606,864\$519. --The State of Minas Geraes has recently published **ADVERTISEMENTS FOR THE SUPPLIES** on municipal improvements in the capital, Belo Horizonte, and for the same of the city water supply of Sao Joao d'El Rey. These are open to competitive bids; they include many kinds of metal pipes and other tubing, cement work, and other material. Details are given in the *Revista Commercial e Financeira*, 29 March, 1913, and later numbers. --**RICE PRODUCTION IN BRAZIL** is the title of the leading article in *Revista Commercial e Financeira* for 5 April, 1913. The writer asserts that, after making all allowance for the undoubted possibilities of wheat growing in the southern parts of the Republic, no claim should be made that Brazil can produce sufficient wheat to feed itself; and that when the country shall have a population of 200,000,000 inhabitants, it must still import wheat and wheat flour and can never think of becoming an exporter. It is wise, therefore, to consider what can be accomplished by growing rice. The world's production (1912) of rice was 102,400,000 tons from a cultivated area of 80,270,000 hectares (hectare = 2.40 acres); that of wheat was 97,000,000 tons from an area of 103,000,000 hectares. The relative production of wheat for the world must therefore decrease as population increases. Rice, however, can be more abundantly grown, and must be better recognized for its food value as time goes on. And as Brazil has immense areas of untilled land readily adaptable for rice culture, one of its future great crops, profitable commercially and valuable in a nutritive sense, should be rice. --A new work on the **PHYSICAL GEOGRAPHY OF BRAZIL** is in preparation by Capt. Theobald Ritter von Mossig, of the Austrian Navy. He is now in the State of Parana collecting data for his subject. --The minister of roads (Viação) has recently taken steps to incorporate into the **NATIONAL SYSTEM OF WIRELESS TELEGRAPHY** the two high-power stations (Marconi) at Manaus and Porto Velho, working in connection with the Madeira-Mamore Railway. These stations, now in operation for over a year, rated at the time of their installation as the sixth in power in the world; they have duplicate apparatus, work with wave length of 4,000 meters, can receive and transmit 10,000 to

15,000 words a day, and are of chief service in maintaining communication between the outer world through Manaos, over 500 miles (in a straight line) across the tropical forest, and Porto Velho, the headquarters of the Madeira-Mamore Railway.—By the initiative of Dr. Boiteux, secretary of the society, there is to be prepared a medal commemorative of the twenty-fifth anniversary of the foundation of the GEOGRAPHICAL SOCIETY OF RIO DE JANEIRO to be celebrated this coming year. This same society has sent two official representatives to the International Congress of Geography at this year's meeting in Rome, Italy.—The Federal Government has now approved the plans for the PORT WORKS OF NICTHEROY. The construction thus begun will be quite distinct from the harbor improvements, now nearly finished, so long actively pushed for the port of Rio de Janeiro. The latter is the capital of the Federal Government as well as a very important commercial harbor; while the former is the capital of the State of Rio de Janeiro, but is of itself growing rapidly in foreign commerce and local industries.—The minister of agriculture has been made a member of the AERO CLUB OF BRAZIL. This club has grown very active in promoting the study and practice of air navigation. On March 29 the aviator Culloch at Rio made another flight in a hydroaeroplane, following the course of the Avenida Beira-Mar, and he rested for some moments over the fort on Villegaignon and the two men-of-war *Sao Paulo* and *Minas Geraes*. Flights of similar character are reported from Sao Paulo, where Sr. Chaves gave exhibitions and flew from Santos, on the coast, to the capital. In Para extensive flights in all directions over both river and forest have been made.—The department of agriculture has been informed that through the agent of the Government in Paris there has been accomplished the DISTRIBUTION OF 50,000 SAMPLES OF MATTE (Paraguay tea). Of these, 21,000 were given to physicians, 27,000 to what in France corresponds to groceries in the United States, and 2,000 to hospitals. Noticeable interest was aroused by this method, as numerous inquiries showed.—The official terms of the concession are published giving authority for the CONSTRUCTION AND SERVICE OF A MARITIME STATION at the port of Sao Francisco, State of Santa Catharina, to the Sao Paulo-Rio Grande Railway.—A GRACEFUL COMPLIMENT WAS PAID TO BRAZIL on February 21 last. It is a long-established custom that the faculty of the University of Paris hold an annual reunion every February, in the principal hall of the Sorbonne, near the residence of the rector. This gathering has for its purpose the better acquaintance and social harmony of the faculty of the university, and is therefore of an intimate nature, outsiders not being admitted. The finale of the reunion is an address (conferencia) delivered by a chosen member on any subject of interest to him.

Brazil was the subject of the address of this year's orator, Prof. George Dumas, who gave careful consideration to many details of value to his audience, and showed himself by his optimistic judgment a sincere and well-informed friend of the country. The only foreigner present was Dr. Rodrigo Octavio, of Brazil, who as professor agrégé of the university was personally invited. All the faculty were deeply interested, and as they represent the best culture of France, the people of Brazil are delighted at the further recognition of their position in the scale of nations.

CHILE

The LONGITUDINAL RAILWAY, which connects all of the southern part of Chile as far as Puerto Montt with the Federal capital and Valparaiso, is being rapidly extended in the northern part of the Republic, and a recent estimate predicted that the entire line would be opened to Pisagua in April last. The total length of this railway is 1,302 kilometers, of which 582 kilometers are in the southern section and 719 in the northern. Santiago is connected with La Serena. The section from Santiago to Calera has a gauge of 1.68 meters. Construction work from Santiago to Calera was finished in 1897, the distance being 72 kilometers and the gauge 1 meter, which is the standard gauge of the Longitudinal railway. The Cheupas River is crossed by a bridge having a span of 30 meters, the line continuing via Peral to Illapel, 26 kilometers from Limalnuda. The section from San Marcos to Ovalle was inaugurated in 1888. In 1896 the division between Ovalle and La Paloma was opened to traffic, and the entire section was put in operation in 1910. The distance from San Marcos to Ovalle is 65 kilometers. From Paloma a branch is now being constructed to Juntas. The section from Ovalle to Coquimbo is the only one in the entire line of 854 kilometers between Calera and Copiapo of a different gauge from that of the rest of the Longitudinal railway. To change the gauge between Ovalle and Coquimbo and that of the Panulillo branch 3,240,000 pesos have been provided in the budget, of which amount 1,167,000 pesos will be used for changing the line and the remainder for relaying steel. The director of the VITICULTURAL STATION of the Government of Chile has issued a circular advising the owners of vineyards that said station gives advice free during the grape harvest concerning the manufacture of wine, a special service being temporarily provided for that purpose. This station has rendered such valuable assistance to wine manufacturers in the past that it was decided to extend the scope of its operations. On the request of owners of vineyards

special visits will be made to the place of manufacture for the purpose of advising operations connected with the manufacture, storage, and disposal of wine. —The holding of the Eighth **SCIENTIFIC CONGRESS** of Chile at Temuco, capital and metropolis of the Province of Cautin, with a population of about 25,000 inhabitants, has called attention to the development of the commerce, agriculture, and manufacture of that city and the surrounding country since the establishment of the provincial capital in 1881. This region, which was, on the date mentioned, an almost impenetrable forest, is now dotted with well-stocked ranches and farms in every direction and produces an abundance of nearly all of the products of the Temperate Zone. The most important manufacturing industries of the Province are those connected with the lumber, milling, and tanning industries. The Province is not lacking in mineral wealth, but its mineral resources have been but little exploited up to the present time. Gold placers and rich deposits of fossil coal are known to exist in the Province. The city of Temuco is in direct rail communication with the Federal capital as well as with the port of Carahue, 60 kilometers distant, at the head of navigation of the Imperial River. Temuco has four banks, namely, the Bank of Chile, the German Transatlantic Bank, the Bank of Chile and Germany, and the Spanish Bank of Chile. The city of Temuco has an abundant supply of potable water, an electric light and power plant, and an excellent animal traction tramway service. —The Government of Chile has been invited to participate in the First **INTERNATIONAL CONGRESS** of Cities to be held in Ghent during the present year, and the International Pharmaceutical Congress to be held at The Hague from September 17 to 21, 1913. —The **CLIMATE** of Vina del Mar, a famous bathing and health resort on the Pacific Ocean near the city of Valparaiso, is ideal. On an average there are 165 perfectly clear, 96 partly cloudy, and 104 cloudy days at Vina del Mar during the year. The average temperature in summer is 17.8 C., in autumn, 13.7, in winter 11.3, and in spring, 13.1 C. The annual rainfall is 602 millimeters, 387 of which is in winter, most of the remainder in autumn, and but very little precipitation in spring and summer.



COLOMBIA

A **SCHOOL OF STENOGRAPHY** has been opened at Bogota by Sr. Victor M. Quijano. —The **SANITARY STATION** at Puerto Colombia was inaugurated on April 15 last. It is one of the best equipped stations in the country and was constructed by the Government at a cost of about \$70,000. —The departmental legislature at

Antioquia has passed a law authorizing the governor of the department, in cooperation with the board of directors of the railway, to organize two corps of engineers for the purpose of making a PRELIMINARY SURVEY OF THE RAILWAY LINES necessary to connect some point near the center of the department with a desirable terminal in the Medellín Valley, or with some place on the Atlantic coast which the committee may deem advisable to select. The railway lines which it may be considered desirable to extend to the Atrato River, below the mouth of the Murri River, and navigation conditions for trans-Atlantic steamers in the fluvial section referred to, are also to be studied, the investigations to be confined to the department of Antioquia. The corps of engineers which will study the region bordering on the Uraba Gulf is to indicate the most desirable point for founding a colony in the interior of the country. The governor has also been authorized to contract a LOAN of \$200,000 for the purpose of making a complete exploration of the Occidental Railway, the reconstruction of the government palace at Medellín, and the completion of the mint at that place. — There are three public LIBRARIES at Bucaramanga, namely, the departmental, that of the Commerce Club, and the hospital library. — The jurisdiction of the CONSULATE of Colombia at Oruro, Bolivia, has been extended to the department of Cochabamba. — The President has issued a decree in honor of the memory of the ILLUSTRIOUS COLOMBIAN, Mrs. Soledad Acosta de Sampere, recommending her civic and moral virtues as worthy of emulation. The press of Bogota announces that Sr. Ramon Troncoso, a mechanic of the capital, has invented a machine for COMPRESSING SUGAR which may be operated by a workman or a half horsepower motor. — The Colombian CIGARETTE COMPANY was recently organized at Medellín for the purpose of manufacturing first-class cigarettes. The EUCHARISTIC CONGRESS will meet in Bogota on September 8 of the present year. — A number of Manizales merchants have organized a company to exploit the TOBACCO INDUSTRY. — The BOARD OF TRADE OF BOGOTA has been reorganized, and Carlos Camacho, and Manuel Carreño T have been elected, respectively, president and secretary of the same. — In 1912 the REVENUES from liquors of the department of Cundinamarca amounted to \$197,140 as compared with \$193,623.50 in 1911. The department of public works has decided to inaugurate in Bogota on July 20, 1913, in commemoration of the date of Colombian independence, the MONUMENTS ordered erected by Congress in honor of the illustrious patriots Rafael Jose Cuervo, and Miguel Antonio Caro. — The Colombian SOCIETY OF FINE ARTS, composed of the best artists of the Federal capital, has been organized in Bogota under the presidency of Sr. R. Acevedo Bernal. — The Government has contracted with Sr. Francisco

Nigrinis to clean and deepen the channel of the LEGRÍJA RIVER. A similar contract has been made for cleaning and deepening the Sogamueso River. —On August 24 next the second anniversary of the FLORAL GAMES, established by the Society of Public Improvements, will be held in Medellín. A prize of \$100 is to be awarded for the best poem, and one of \$50 for the best prose work. —The net receipts of the Zipaquirá SALT DEPOSITS from January to June, 1912, amounted to \$218,077.05. —The departmental legislature of North Santander is considering a plan for holding an industrial, agricultural, and historical EXPOSITION, commencing July 20, 1914, for the purpose of securing funds with which to establish a museum. —The measures adopted for the destruction of LOCUSTS in some of the departments of the Republic have given good results. —The Industrial BANK at Cartagena, under the management of Sr. Geronimo Martinez, has been opened for business. —A corps of engineers of the Breitung MINES Corporation arrived in Barranquilla in April last for the purpose of exploring mines in Colombia. The party has mining tools and instruments, gasoline motor boats, and other supplies, and is said to be the best equipped mining expedition that has ever come into the country with the object of making explorations on a large scale. —The department of the interior has given orders for the making of a new MAP of the Republic. —The Government has decided that, in addition to the study of German, English, and French by the officers of the military staff, PORTUGUESE is also to be added to the course. A Portuguese professor has been contracted with for that purpose.



COSTA RICA

One of the best natural harbors on the Pacific coast between the Strait of Magellan and the Gulf of California is the GOLFO DULCE, on the west coast of Costa Rica. This gulf is about 25 miles long by 10 miles in average breadth, has a depth of water in most places a short distance from the shore of from 30 to 60 feet, and is well protected on all sides from dangerous winds. The proximity of this body of water to the Panama Canal, it being only a few hours journey from the western terminus of that international waterway, gives it a commanding position not only with reference to the coastwise trade of Costa Rica but also with regard to the trade of the Republic with the rest of the world. Without doubt this part of Costa Rica, with its splendid location and superb climate, is destined to experience a rapid development in the near future. The soil in the vicinity of Golfo Dulce and of the streams that flow into it is

exceedingly rich, and prosperous agricultural colonies could be formed there as a nucleus for what will in all probability soon become a great shipping and industrial center of the country. An excellent site for a port is said to be available on the shores of the "Golfito," or Little Gulf, a calm, deep, inland body of water communicating with the Golfo Dulce and naturally fortified at its entrance and along its shores by high and rocky bluffs. It is predicted by persons in Costa Rica well informed in maritime affairs and international commerce that somewhere on the Golfo Dulce or "Golfito" a busy Costa Rican port will spring up to handle the trade that will naturally come to the Pacific coast of Costa Rica through the opening of the Panama Canal. — The CORDAGE FACTORY recently established in San Jose by Sr. Federico Paralta is equipped with the most modern machinery obtainable in the United States and England. The raw material used in the manufacture of twine and rope is the fiber of a species of the American agave, locally known as "cabulla." This fiber is drawn out into coarse threads by a carding machine, and is then fed into a fining machine, from which it emerges in the proper form for making cordage of 3, 4, 5, and 6 strands. The capacity of the factory is 22 quintales of cordage daily. Experts have pronounced the cabulla of Costa Rica to be equal or superior to the sisal or henequen of Yucatan. When properly cultivated, 1,000 leaves of the cabulla plant produce 100 pounds of fiber. As cabulla thrives on stony and worn-out lands, an effort is being made to induce farmers to utilize lands of this kind in the cultivation of cabulla, and establish in this way a new and profitable industry in the Republic. Another plant, known as "platanillo," grows in abundance in Costa Rica and produces an excellent fiber to the extent of about 50 per cent of its weight suitable for the manufacture of cordage. — The courses of the LYCEUM OF COSTA RICA, the Normal School, and the Commercial School have been reorganized in accordance with the curriculum published in the Official Gazette of March 5 last. — A postal MONEY-ORDER CONVENTION has been made between Costa Rica and Chile. The franc has been adopted as the unit to be used in expressing value. — Messrs. Carlos Heimpell II. and Fernando Beingolea have been appointed, respectively, CONSULS of Costa Rica at Santiago de Chile, and Callao, Peru. — In December, 1912, and January, 1913, there were collected in Costa Rica for the HOSPITALS at San Jose, Puntarenas, Cartago, Heredia, Alajuela, Liberia, and Limon 2,082.55 colones, about half of which was for the use of the hospitals at San Jose and Puntarenas. — The entrance fee charged pupils who matriculate in the SCHOOL OF DOMESTIC ARTS at San Jose has been fixed at 20 colones, with an additional monthly charge of 3 colones during the entire school year. — The municipality of the

canton of Canas has contracted with Arturo Zuñiga Arias, of San Jose, for the construction of a **PUBLIC MARKET** at a cost of 8,700 colones.—A building for the use of the department of **POSTS** and telegraphs is to be constructed in San Jose.—Preliminary steps have been taken for the laying of **WATER MAINS** in the Angeles and Concepcion de San Rafael de Heredia districts. The water supply is being measured during the dry season, so that the minimum quantity obtainable during the year will be accurately known.—The **DREDGES** bought by the Government of Costa Rica in Panama for use in dredging the Estero River have been received, and the work of deepening the stream is to be carried forward as rapidly as possible.—In February, 1913, there were 1,334 births in the Republic of Costa Rica, 652 of which were males and 682 females. The deaths during that month numbered 686, of which 340 were males and 346 females. The increase of births over deaths during the month referred to was 648. There were 163 marriages in the Republic in February, 1913, of which 157 were ecclesiastical and 6 civil.—Press reports state that Esparta is to have an **ELECTRIC LIGHT** and power plant, to be installed by José and Alberto Lopez Cantillo, who are reported to have ordered machinery and supplies abroad for this purpose.—A cablegram from New Orleans, published in "El Noticiero," states that the United Fruit Co. intends to build fine hotels at San Jose and Limon.



The **CABINET** of President Menocal has been announced as follows: Col. Aurelio Hevia, secretary of the interior; Dr. Leopoldo Cancio, secretary of the treasury; Dr. Enrique Nuñez, secretary of health and charities; Dr. Cosme de la Torriente, secretary of state; Dr. Cristobal de la Guardia, secretary of justice; Gen. Emilio Nuñez, secretary of agriculture; Dr. Ezequiel Garcia, secretary of public instruction, and Sr. J. R. Villalon, secretary of public works.—A presidential decree of April 23 last prohibits the **SLAUGHTER OF COWS** from February 1 to September 30 of each year. Recent statistics of the department of agriculture of Cuba show a considerable decrease in the number of cattle in the island during the past three years, and a protective measure was deemed necessary to encourage the natural increase of cattle in the country.—A special **TRANSPORTATION RATE**, one-fifth less than the regular rate, has been obtained by the Fourth International Congress of School Hygiene to be held in Buffalo, N. Y., in August next for Cuban delegates attending the same.—Two

WOMEN LAWYERS have recently been graduated from the National University at Habana, one of whom will practice in the Province of Oriente. — The treasury department has issued an order requiring that all foreign and coastwise vessels anchoring alongside a wharf in Cuban ports shall be fumigated for RATS at intervals of time not exceeding six months, proof of which shall be made by presenting to the proper officials a certificate from the Cuban health department or from health departments of foreign countries. — On April 23 the President of the Republic sent three messages to the National Congress, one of which recommended the approval of the change of consuls at Santa Cruz and Puerto Cabello, another requesting an appropriation for the erection of a monument in New York in commemoration of the destruction of the MAINE, and another asking for a subvention for the construction of a railway between Banes and Herrera. — A PETROLEUM DEPOSIT in the Province of Matanzas, near Lagunilla on the Menendez farm, has been denounced and registration made by Adolpho J. Greit. — A law promulgated on March 27 last provides for the appointment of resident physicians as provincial SUPERVISORS OF HEALTH and charity in each of the Provinces of the Republic. — The committee appointed to prepare rules and regulations concerning the importation, manufacture, storage, transportation, sale, and use of EXPLOSIVES in the Republic has submitted a draft of same to the department of interior for examination and recommendations. — A large DRY DOCK is planned to be constructed at Habana by Engineer Gabriel G. Menocal at a cost of \$1,340,913. The new dock will be built on the Marimelena inlet and will occupy a space of about 4,140 square meters. It is estimated that \$75,000 will be spent in excavating the site, \$159,000 in driving the piles and laying the foundation, \$121,000 in the ways and machinery, \$25,000 in the building for the plant, \$115,000 to \$120,000 for the machinery, \$45,000 for the shops, and \$20,200 for the electric power house. — The municipal council of Colon, Cuba, has authorized Sr. Ruiz Torres to install an ELECTRIC LIGHT PLANT, exempting him from the payment of municipal taxes for a period of three years. — According to data compiled by the department of agriculture of Cuba, the exports of SUGAR of the new crop up to February 28 last amounted to 530,000 tons, of which 7,482 went to Europe and 2,954 tons to the British possessions in America. The approximate value of this sugar sent to the United States is \$21,000,000. — The Government of Cuba has been invited to participate in the following congresses, conventions, and expositions: Pan American Scientific Congress to be held in Washington in 1914; International Congress of Refrigeration to be held in Chicago in September, 1915; various congresses to be held during the Universal and International

Exposition of Ghent in 1913; the international alcoholic congress in Milan in 1913; Fourth International Customs Congress in Paris in 1914; Fourth International Congress of School Hygiene to be held in Buffalo in September, 1913; International Congress for the protection of infancy to be held in Brussels in July, 1913; Twelfth Session of the International Geologic Congress in Toronto, Canada, in August, 1913; International Congress of Physical Therapeutics, Berlin, March 25 to 30, 1913; Eleventh International Congress of Pharmacy, The Hague, September, 1913; Third International Children's Congress, Washington, April, 1914; Second World's Congress of International Associations, Ghent and Brussels, June, 1913; International Rifle Match, Camp Perry, Ohio, September, 1913; Tuberculosis Conference, Island of Trinidad, March, 1913; International Convention of Commercial Statistics, Brussels, March, 1913; Hispano American Exposition, Seville, Spain, 1914; Universal Exposition, New Orleans, 1915, and Panama-California Exposition, San Diego, Cal., 1915.

DOMINICAN REPUBLIC

The Central Dominican Railway has put into effect an order requiring the issuance of duplicate **BILLS OF LADING** covering shipments consigned abroad. These bills of lading must show date of shipment, number of packages, marks, consignee, etc.—An American company has contracted with Sr. Manuel Polanco to build a **THEATER** on land belonging to the latter gentleman in the city of Santo Domingo. The building is to be a steel structure costing \$80,000. The contractors have arranged to lease the theater from Señor Polanco for a period of eight years.—Press reports state that C. H. Callaghan, a representative of the Benner line of steamers which operates between Cuba and Porto Rico, is negotiating with the Federal Government for the establishment of a **NEW LINE OF STEAMERS** between the United States and Santo Domingo.—The Government of the Dominican Republic has been invited to participate in the following **INTERNATIONAL CONGRESSES**: The Fourth International Congress against alcohol, to be held in Brussels; the Fifth Latin-American Medical Congress, to be held in Lima, Peru, in November of the present year; the Sixth Pan American Medical Congress, to be held in Lima during the same month; the International Exposition of Maritime Hygiene, to be held in Lima in November, 1913; the World's Congress of International Associations, to be held in Brussels in June of the present year; the International Exposition of Maritime Hygiene and Italian Colonial Exhib-

its, to be held in Genoa; and the Panama-California Exposition, to be held in San Diego, Cal., in 1915. — Work has been commenced at La Vega on the construction of a HOSPITAL, to be called "La Humanitaria" The Humanitarian. A large part of the funds for the building and equipment of this hospital was collected through the efforts of Father Lamarche. — An ICE FACTORY has been established at Seybo. The factory is equipped with the most modern and up-to-date ice-making machinery. A large business is being transacted, and the undertaking promises to be one of the most successful ice plants in operation in the Republic. — Moore & Co., who are furnishing ELECTRIC LIGHT and power to the city of Puerto Plata, have arranged to extend the service to private persons. At the present time Puerto Plata has 41 metallic arc lights in use in lighting the city. — The *Listin Diario*, a daily newspaper of the city of Santo Domingo, in an editorial comment upon the NORTHERN RAILWAY, which is planned to run from the Federal capital to Cibao, states that the building of this line is a social and economic necessity, inasmuch as its construction and operation would put the metropolis of the Republic in direct rail communication with a region of country producing many of the necessities of life the major portion of which are now imported. The building of this line would also foster and encourage closer commercial and social relations between the inhabitants of the Federal capital and those of the interior of the country and would tend to reduce the cost of living by making available at lower prices numerous agricultural and stock products grown within easy transportation distances of the most populous centers of the nation. It is reported that foreign capitalists are willing to undertake the construction of this railway, and that preliminary steps have been taken to obtain the necessary concessions for this purpose from the Dominican Government. If satisfactory and equitable arrangements are made by the Government with these capitalists, the Dominican Republic may soon have under construction a railway that will open up an immense area of the richest agricultural, stock, and forestal sections of the country. — Sr. Juan B. Guzman has been appointed CONSUL GENERAL of the Dominican Republic at Madrid, Spain, and Sr. Belen D. Sanchez CONSUL at Cape Haitien, Haiti. — A large CUSTOMHOUSE is being constructed in the city of Santo Domingo to be used for storage purposes. — The board of commerce, industry, and agriculture of the city of Santo Domingo established in the Federal capital on May 1 of the present year a school of TYPEWRITING AND BOOK-KEEPING. A corps of expert teachers has been employed, and the school has been fitted up with all modern appliances. The courses are free to persons qualified to enter same, and the curriculum embraces a period of one year.

ECUADOR

The masonry work on the Ambato to Curaray RAILWAY was begun during the latter part of March. The entire line has been surveyed and a large part of the roadway staked off ready for grading. The work of construction is planned to be done by the Government in about two and one-half years. If, however, the board of directors should decide to have the road built under contract, it would probably be completed in about half that time, as a number of contractors could be employed in the different operations of construction. The road passes through the Province of Tungurahua and will run in the neighborhood of the towns of Pelileo, Pillaro, and Patate, traversing a rich agricultural, stockraising, mining, and forestal section of Ecuador, and opening up a vast territory in the eastern part of the Republic exceedingly rich in natural wealth.—An AVIATION SCHOOL is soon to be founded in Guayaquil, funds having been collected through an aviation committee appointed for that purpose and through the Guayas shooting and aviation club. Negotiations are in progress for purchasing in Europe the aeroplanes and materials necessary for equipping the school in a first-class and up-to-date manner. The corps of instructors and mechanics will consist of the best talent obtainable. There is much enthusiasm on the subject by persons engaged in the work of founding the school, among the most active promoters of which may be mentioned Dr. Bartolome Huerta and Sr. Reinaldo Descalzi.—The organizing committee of the CONGRESS OF STUDENTS of the Great Colombia, the third meeting of which is to be held in Quito during the present year, has appointed Messrs. Alejandro Ponce, Juan J. del Pozo, and Luis F. Ruiz to negotiate with the departments of foreign relations and of public instruction of Ecuador in the Federal capital for the purpose of obtaining the cooperation and assistance of the Government in fixing the date of the meeting and in making the Congress a success.—Dr. Alberto Muñoz Vernaza, an able writer and eloquent orator, has been appointed MINISTER of Ecuador near the Governments of Colombia and Venezuela, with residence in Bogota.—A MILITARY BULLETIN is being published by the department of war of the Government of Ecuador for the exclusive use of the army. Each number of the publication is to contain about 80 pages of reading matter on military and kindred subjects copiously illustrated.—An official connected with the electric power plant and tramway line at Quito reports that the electric installation will be completed and the TRAMWAY placed in operation from the railway station of the

Guayaquil to Quito Railway in the suburbs of the Federal capital to Colon Avenue on or before April 1, 1914. — The President of the Republic has approved the budget for 1913 for the NATIONAL SCHOOL OF FINE ARTS amounting to 30,780 sucres. — The Manta to Santa Ana RAILWAY Co. has petitioned the Federal Government for permission to operate the railway line from Manta to Portoviejo before officially delivering same to the State. — A WIRELESS TELEGRAPH installation has been erected at Guayaquil capable of sending messages as far as Paita, Peru. — A recent executive decree provides that in computing the time of MILITARY SERVICE in the Ecuadorean army the time served by officers and cadets in other countries shall be included. — In 1910 the IMPORTS of Ecuador from Chile amounted to 110,774 sucres as compared with 102,242 sucres in 1911, consisting principally of cereals, flour, canned goods, and wines. — On April 1, 1913, the NIGHT SCHOOL in Guayaquil, entitled "Juan Montalvo," opened its sessions with a large number of pupils. This school is supported by the bakers' union. — The Governor of the Province of Guayas has been authorized by the President of the Republic to contract with the National Telephone Co. for the installation of a TELEPHONE LINE from Guayaquil to the city of Playas. — A company has been organized in Guayaquil, with a capital of 20,000 sucres, to negotiate in the United States, through a committee appointed for the purpose, with circus managers, with the object of bringing an American circus to Ecuador during the summer months. — The President of the Republic has issued a decree providing for the construction of a TRAIL (Camino de herradura) in southern Ecuador from Loja to Zamora in cooperation with the municipality of Loja. — On March 1, 1913, the NORMAL AGRICULTURAL SCHOOL was opened at Ambato. — Arrangements have been made by the Government of Ecuador for the issuance of domestic POSTAL MONEY ORDERS, the maximum amount of any one order not to exceed 100 sucres and the minimum not to be less than half of a sucre.

GUATEMALA

President Estrada Cabrera has authorized The West RUBBER Co. of New York, upon the payment annually of a license fee of 1,000 pesos, to transact business in the Republic. — The President of Guatemala has accepted the invitation to participate in the International CONGRESS OF SCHOOL HYGIENE to be held in Buffalo, N. Y., from the 25th to the 30th of August next, and has appointed Dr. Ramon Bengoechea to represent the Guatemalan Government.

David Bowman has been appointed CONSUL of Guatemala in London.—Guillermo Scheel, of the city of Guatemala, has petitioned the department of fomento of the Guatemalan Government for permission to introduce and cultivate on a large scale for a period of 15 years the Japanese plant known as "soya" (*Glicine hispida*) or SOY BEAN. The petitioner also requests permission for the free importation of the machinery necessary for the cultivation of the plant referred to and the installation of the factory, and requests that all soy beans raised in the Republic be sold to him in preference to other buyers at the market prices in Guatemala or those of foreign markets. A request is also made for 20 caballerias of Government lands in the district of Barillas, Department of Huehuetenango, to be used in establishing a model farm for the cultivation of soy beans.—Sr. L. Weintahl has been appointed delegate of the Government of Guatemala to the Eleventh International CONGRESS OF PHARMACY to be held at The Hague from the 17th to the 21st of September of the present year.—Decree No. 867 provides for the holding of an election throughout the Republic on December 15, 1913, for the purpose of choosing DEPUTIES TO THE FEDERAL CONGRESS to take the place of members of that body whose terms expire on February 28, 1914.—There are a number of SALINE SPRINGS in exploitation in the Department of Huehuetenango in the western part of the Republic of Guatemala. At the village of Nuca the saline springs known as "El Porvenir" (The Future) have been worked by the Indians for supplying their own needs and for exchange in the surrounding country from time immemorial. The production of salt from these springs is not large and is consumed locally. In the neighborhood of San Mateo, situated on the slope of the Bobi Mountain 2,540 meters above the level of the sea, are located the salt springs, the exploitation of which is the principal industry of the town. This part of Guatemala is rugged and broken and mountain peaks rising about 3,000 meters above the level of the sea make this district one of the most picturesque regions of the country. There are four salt springs at San Mateo owned and operated by the municipality. The water of these springs is highly charged with salt and contains no injurious foreign substances. The salt manufactured by the Indians from this water is dark in color and has a peculiar taste. It is, however, much in demand in the surrounding country, since it is reported to have valuable therapeutic properties. At the Santa Delia plantation a short distance from San Mateo there are also four salt springs in exploitation. Although the soil and climate of this part of Guatemala is adapted to agriculture and stock raising, these industries are at present in a somewhat backward state in the vicinity of the saline springs, owing to the fact that the Indian laborers who work at the springs are able to obtain all their staple food supplies by

exchanging salt for same. The town of San Mateo has about 1,000 inhabitants, and is supplied with an abundant quantity of good potable water. The town also has a well-constructed municipal building, an attractive plaza containing a kiosk, separate schools for boys and girls, and a night school. The American Bank of the city of Guatemala has been authorized to establish in the Republic an agency of the corporation entitled FEDERATION LIFE ASSOCIATION, a life insurance company with headquarters at Toronto, Canada, for which privilege a license of 1,000 pesos annually must be paid by the said company into the Federal treasury.

HAITI

The DEATH OF PRESIDENT TANCRÈDE AUGUSTE, which occurred on May 2, was entirely unexpected, although he had not been in his usual state of health for the past month, and caused a deep feeling of grief in the country. During his short term of office, his election to the presidency having taken place last August, he had won the esteem and confidence of the people through his earnest and sincere desires to better the condition of his country. Senator Michel Oreste was elected on May 4, to succeed President Auguste. The OPENING OF THE THIRD SESSION OF THE XXVII CONGRESS, which took place on April 28 in the presence of the members of the diplomatic and consular service, the clergy, and high officials of the Government, was an event of unusual brilliancy and interest. The music for the occasion was furnished by the Palace Band, which rendered a fine program of patriotic and national airs. The opening address was delivered by the President of the National Assembly, Senator Sudre Dartiguenave, to which the Minister of the Interior, Mr. Seymour Pradel, responded. Following the speech of the minister, the meeting was adjourned and a reception was held in the reception room of the palace of the House of Deputies, where toasts were offered to the prosperity of the country by the president of the National Assembly, by Mr. Furniss, the American minister and dean of the diplomatic corps, the archbishop, the minister of the interior, and others. The session convened an hour later, and a committee was appointed to officially notify the President of the opening of Congress and to offer him its respects. This committee was headed by Senator Michel Oreste, who, after the death of President Auguste, was elected to take his place. The other members of the committee were Senators M. Sylva and D. Roche and Representatives Denis St. Ange, Droissant Lilavois, Martin Calixte, Dannel and C. César.—The

HOUSE OF REPRESENTATIVES elected for SPEAKER Mr. St.-Amand Blot, who was formerly secretary of legation in London and also represented his Government at the International Exposition of Brussels.—On August 12 the late President Tancredè Auguste signed the decree creating a new INTERNAL DEBT by a bond issue of \$634,000 bearing $6\frac{3}{4}$ per cent interest. The bonds, which are numbered from 1 to 2,224, are of the following denominations: 1,589 bonds of \$100, 318 of \$500, and 317 of \$1,000, representing a total of \$624,900 gold, which will be offered to the public at the rate of \$90 for each \$100. The subscriptions which were opened on April 19 and closed on April 22, amounted to 11,000,000 gourdes. The list of subscribers with the amount of their subscriptions was turned over to the secretary of finance and commerce. The proceeds of this loan are to be applied to the immediate withdrawal of 2,000,000 gourdes from circulation.—The annual AGRICULTURAL FAIR was held on May 1 in Port au Prince, and the program of the festivities given upon this occasion and the exhibits were unusually interesting. A novel feature of the fair was the procession of carriages and automobiles, prizes being awarded to the most artistically decorated.—It is announced that the National Railroad Company of Haiti is preparing to build a handsome STATION AT PORT-AU-PRINCE.—The INAUGURATION of the LECONTE PARK of Port-au-Prince took place on May 11, when a series of running and obstacle races were given for the Challenge Cincinnatus Leconte.—The Moniteur Officiel of April 5 published a presidential decree signed by President Tancredè Auguste on March 7, regulating the RELATIONS OF THE ROMAN CATHOLIC CHURCH with the constitutional authorities of the Republic. —Mr. J. N. Léger, Secretary of State of Haiti, has issued the RULES GOVERNING THE DEPARTMENT OF STATE which was recently reorganized. —The post office of Port-au-Prince has established MAIL BOXES in different sections of the city.



HONDURAS

The Government of Honduras has contracted with H. A. Owen to organize a SCHOOL OF PRACTICAL AGRICULTURE at Siguatepeque, Department of Comayagua. The curriculum of this school covers all the branches taught at the present time in the most modern and up-to-date colleges of agriculture. The mornings of each school day are to be occupied in the field in the study of practical agriculture and the afternoons are to be taken up with the study of agriculture and allied subjects and theoretical demonstrations and lectures

in the class rooms. The students will live at the school during the sessions of the same, and the Government has at its disposal 34 scholarships to be given to meritorious students selected from different departments of the Republic. A meteorological station will be established and operated in connection with the school. Pupils attending the school of practical agriculture will be furnished with the tools, apparatus, animals, and harness necessary for them to use in carrying on the work. Beginning with May of the present year the Government will pay to the school a subvention of 200 pesos per month and will allow Mr. Owen 18 pesos per month for each pupil in attendance. The contract is for a period of one year from May 1, 1913, and is subject to renewal indefinitely if agreeable to both of the parties in interest.—The eastern coast of Honduras has recently been visited by John P. Ransch and Rudolph Frasdick, both of whom are engaged on a large scale in the lumber business at Abita Springs, La., for the purpose of examining the **TIMBER RESOURCES** of the Caribbean coast of the Republic. After a careful examination the gentlemen referred to are reported to have been so favorably impressed with the prospects for developing the lumber industry in Honduras that they have solicited a concession from the Honduran Government to exploit the pine forests in the vicinity of Iriona. An immense quantity of marketable timber, consisting not only of pine but of mahogany and other precious woods, is found in the vicinity referred to, much of which is near navigable streams, thereby rendering it easily available for transportation to convenient sawmill sites, or to the sea to be shipped in the form of logs to the markets of the world.—A recent Executive decree, duly approved by the Federal Congress, continues in force the concession granted on May 12, 1908, by the Government of Honduras to Thomas W. Troy, an American citizen, for the **NAVIGATION OF LAKE YOJOA** by means of a 100-horsepower steel vessel 75 feet long by 12 feet wide. The concessionaire has built a wagon road from Pimienta to Lake Yojoa at a cost of 25,000 pesos, and in his petition for an extension of time states that he is now ready to transport said vessel from Puerto Cortes to the lake, set it up and commence the navigation service called for under the terms of the concession.—Executive decree No. 23 extends for a period of six years from May 17, 1912, the concession granted to Gen. Mariano Orteiz, of the city of Choluteca, for the establishment in that municipality of a factory for the manufacture of **ROMAN CEMENT BLOCKS**, granting to the concessionaire the right to import free of duty the machinery, material, and supplies necessary to erect, install, and operate said factory.—A law promulgated on February 22, 1913, and effective on and after that date, changes the seventh paragraph of article 5 of the **SEALED PAPER AND STAMP LAW** as follows: "In the legalizing of signatures in

documents coming from abroad which are to be valid in Honduras, and in documents from Honduras which are to be valid abroad, stamps of the value of 5 pesos shall be attached to the sealed paper on which the authentication of the department of foreign relations is written."—Sr. Juan José Luna, a Salvadoran citizen resident in San Jose, Honduras, Department of Comayagua, has been granted an extension of time in which to establish FACTORIES for the manufacture of cotton fabrics in the villages of San Jose and Jesus de Otero, the latter situated in the Department of Itibuca. The concessionaire is obligated to teach the weaving industry to a limited number of Honduran apprentices.—The referendum contract made by the President of Honduras on May 5, 1911, with Gen. Calixto Marin for the exploitation of the Guare PETROLEUM DEPOSITS, has been submitted to the National Congress for approval. E. C. Morgan, the American engineer who examined the petroleum zone referred to in the Department of Comayagua, reported that a large area in that district was undoubtedly underlaid with oil. The present contract provides for the construction of a cart road from Signatepeque to Lake Yojoa and gives the Government of Honduras 10 per cent of the oil extracted in the operation of the petroleum deposits.



On July 1 of this year, if the bill now before the Congress becomes the law, there will be added to the cabinet of the Federal Government of Mexico a new member with the title of SECRETARY OF AGRICULTURE. On April 10 a bill was introduced into the National Chamber of Deputies calling attention to the growing importance, in all countries of the world, of the study of the soil for the development of productiveness that will increase the food supply of the people. Hitherto in Mexico the division of agriculture had, according to the constitution and the later modifications, been given to a cabinet officer whose functions embraced also the control of other activities. But as agriculture is so essentially valuable to Mexico, the creation of a new and independent department of the Government has been advocated by the statesmen of the Republic and the idea was embodied in a report made at the last session of the Congress, the result of which is the present bill. It provides for a secretary of agriculture and colonization who shall have charge of lands, waters, forests, and all matters intimately connected with them, such as meteorological observations, statistics, and the settlement of unoccupied regions. This will make the ninth cabinet officer in the Gov-

ernment.—On April 16 the CLASSES IN THE FREE SCHOOL OF LAWS (Escuela Libre de Leyes) were begun for the second year. The ceremony was attended by many high officials of the Government, among them being the minister of public instruction, who, while praising the school, stated the Government had decided to give financial support to it and that its graduates would be recognized the same as those of the national faculty.—On April 5 there was opened for business the new RAILWAY BETWEEN MEXICALTZINGO AND ZAPOTITLAN. This is a short line of only 11 kilometers (nearly 7 miles), but it touches a very important and productive part of the country somewhat east of the capital. Many officials of the Government were present as guests. —The NEW OFFICES FOR THE DEPARTMENT OF FEDERAL TELEGRAPHS, in the recently constructed palace of the Department of Communications and Public Works, Calle Tacuba, were placed in service on April 8. Everything was moved from one series of rooms to the other with no disturbance to the routine. The quarters set aside for these offices are well adapted and equipped for the work of the division, the hygienic conditions being especially pleasing. A separate compartment is reserved for the press, so that the immense business of the newspapers of the capital can be conducted economically and with dispatch.—A MANUAL TRAINING SCHOOL FOR CHILDREN, especially girls, of the surrounding district in the City of Mexico has just been finished and its work started. It is the gift of one of the philanthropists of the city, Señor Eduardo Orrin.—The TELEGRAPH SYSTEM OF THE REPUBLIC was increased last year, according to the message of the President read April 1, 1913, by 1,043 kilometers. Subterranean cables entering the capital have now a length of 3,640 meters. Toluca is now connected by telephone with the National Palace, and the line works so satisfactorily that it is planned to extend similar connection to other cities. It is worth noting that telegraphic correspondence has during the last six months (July to January) increased 13 per cent.—The Asociación de Periodistas Metropolitanos (MEXICO CITY PRESS ASSOCIATION) celebrated April 24 their second anniversary of existence. Great enthusiasm was shown by the members present, because the association had accomplished a great deal in the way of strengthening the spirit of journalism and the ties that should bind all working journalists together.—Interesting statistics on the TRAFFIC VIA THE TWO ISTHUSES, Tehuantepec and Panama, have just been given in the *Economista Mexicano* for March 22, 1913. They embrace the half year from July to December, inclusive, 1912. Commerce westward was valued at \$30,000,000 across the Isthmus of Tehuantepec and at 80,000,000 across Panama. Eastward traffic—that is, from the west coast and

Hawaii—amounted to \$16,000,000 via Tehuantepec, and four and one-half millions via Panama.——On April 11, 1913, the Government published a LIST OF 100 MINES DECLARED VOID since October 24, 1912, according to the law of June 6, 1892. Similar lists have appeared earlier. These mines had been located—24 in the State of Tamaulipas and 76 in the State of Zacatecas. Most of them were for both gold and silver, but many had been denounced as containing silver and lead, a few with copper, and several of either gold or silver alone. The largest was for a copper mine in Zacatecas of 50 hectares (123½ acres), the smallest for a mine of silver and gold in Zacatecas of only 0.37 hectares (ninety-one one hundredths of an acre).——The “Diario Oficial,” which is the official organ through which all acts of the Government are made known to the public, has decided, since the 7th of April, 1913, to make use also of the secular press, whenever occasion might make it advisable, for insertion of such notices of corrections and changes, or of modifying acts as should be immediately known to the people throughout the Republic. To that end a bulletin was issued as follows (abridged):

* * * The daily press of the capital has been requested, in the interest of the public, to grant space in their columns whenever proper to reproduce in the form of a Boletín announcements published in the Diario Oficial. This request was most courteously granted. By this means it is hoped that important notices may be more expeditiously brought to the attention of the people not only in Mexico City but also throughout the Republic. The director desires to thank thus openly his colleagues.——In the Department of Promotion (Fomento), Colonization, and Industry there has recently been established a SERVICE OF (CANJE) FREE DISTRIBUTION OF PUBLICATIONS ON SCIENCE, ARTS, AND INDUSTRIES, with especial reference to the encouragement of the study of these subjects within the Republic. This service will be arranged under these conditions: (1) The post office, both national and foreign, will transmit at the expense of the department of promotion such publications as are issued for exchange or for simple distribution provided they are not exposed for sale; (2) advantage can be taken of this service by any institution that has for its purpose the diffusion of knowledge, and individuals also are so privileged, provided that published works deal with the diffusion of knowledge that contributes to science, industry, or the arts; (3) on proper application to the minister of promotion anyone may secure this advantage. The subsequent regulations give the details of the procedure by which these advantages can be obtained.——On the small islands in the Pacific Ocean off the coast of Lower California, slightly to the south of the dividing line, there are DEPOSITS OF BASALTIC ROCK which have lately attracted attention. A concession has lately been given for the ex-

plotation of these deposits. — On April 2, 1913, the *Diario Oficial* published a formal notice that that date was to be celebrated for the first time as a NATIONAL HOLIDAY FOR THE REPUBLIC. The announcement reads (in part) somewhat as follows: "The 2d of April is both a martial and a patriotic page in the history of the country. On that date in 1867 an army of Mexican patriots stormed and captured a supposedly impregnable city (Puebla) that five years before had resisted the armed legions of France. This event brought triumph to the cause of the patriots and secured the emancipation of Mexico, and has therefore on mature deliberation been declared a national holiday. The flag is to be raised on all public buildings in celebration of the day, as well as a token of admiration for the illustrious leader, Gen. Don Porfirio Diaz." — The contract has been signed for the construction of a new RAILWAY in the State of Tamaulipas between the city of Tampico and La Barra (the bar), which is to be prolonged to the coast ultimately. The concessionaire is the Electric Light, Power & Traction Co. of Tampico (la Compañía Eléctrica de Lux, Fuerza y Tracción de Tampico), and agrees to finish the work at the end of two years from the signing of the concession (January 14, 1913). — Great activity has been recently shown for the EXPLOITATION OF CHICLE AND WOODS within the national territory of Quintana Roo, and several operating companies, having secured concessions from the Federal Government, are preparing to begin operations with that end in view. Of a somewhat similar character and within about the same region is the work to be undertaken by a COMPANY TO GATHER SPONGES AND TURTLES along the coast of Yucatan and of the Territory of Quintana Roo.

NICARAGUA

The reorganization of THE PUBLIC SCHOOLS OF THE REPUBLIC is receiving careful attention from the ministry having the matter in charge. There is to be established a large normal school with the most modern and substantial equipment, and eight instructors will be engaged. A high school for girls is also one of the projects of the Government, with the curriculum and method of instruction founded on the system in the United States. — The CONSTRUCTION OF A RAILWAY, as has once before been proposed, between the west and the east coasts, is one of the plans very seriously considered by Gen. Emiliano Chamorro, the newly appointed minister from Nicaragua to Washington. The line would connect Rama, not far from Bluefields, with San Ulbaldo on Lake Nicaragua, a distance of 90 miles, and when

completed it would place the capital, Managua, within seven days of New Orleans and in close touch therefore with the markets of the United States.—**THE VALUE OF THE NEW MONEY** is as follows: One córdoba equals $12\frac{1}{2}$ pesos, and there are in paper currency bills of 100 córdobas; 50 córdobas; 20 córdobas; 10 córdobas; 5 córdobas; 2 córdobas, and 1 córdoba. In silver money there are coins of 1 córdoba; of 50 cent(avos), 25 cents; 10 cents; in nickel, 5 cents, 1 cent, $\frac{1}{2}$ cent; all in multiples or in fractions of the unit called a córdoba, as given above. This coined córdoba contains 25 grains silver nine-tenths fine, and the other coins in proportion.—**THE MILITARY BAND**, under the administration of the comandante de armas of the Department of Masaya, is to be equipped with a full set of about 50 instruments. Among these are 4 clarinettes, 2 flutes, 1 hautboy, 3 cornets, 6 saxhorns, 2 trombones, and the other instruments necessary for first-class performances. The price allowed for them is about \$330 gold at the factory.—**THE PROFESSORSHIPS OF THE TEACHING BODIES** have been announced as follows: In the faculty of the national school of medicine, surgery, and pharmacy, in the capital (Managua); in the faculty of laws in the capital (Managua); in the faculty of the west law school (Leon); in the faculty of the east law school (Granada). This is by order of the President, and the appointees are to report at once at the place where their activities are to be carried out.



A decree of President Belisario Porras of April 1 of the present year establishes a **CLAIMS COMMISSION**, consisting of three persons, to represent Panama in facilitating the settlement of the claims of Panaman citizens pending before the Government of the Canal Zone. The chairman of this commission is Dr. Saturino L. Perigault, and the other two members are Engineer Umberto Vaglio and Sr. Carlos E. Diez. The members of the commission will receive salaries and transportation expenses. One of the duties of the commission will be to confer with the Governor of the Canal Zone for the purpose of obtaining free transportation to the new town of Gorgona of the persons, baggage, and chattels of those who have to leave the Zone on account of the disoccupation order of the American authorities. The commission will continue in the exercise of its duties until all of the claims referred to are adjusted. The expenses of the commission will be paid out of the item in the budget for the present year for the installation of the town of Nueva Gorgona.—The municipality of Sona has contracted with Manuel S. Reyes to install

36 lights for LIGHTING the municipality during the present year for a consideration of 600 balboas. — The National Institute of the City of Panama has arranged to issue 41 COMPETITIVE SCHOLARSHIPS, apportioned among the seven Provinces of the Republic according to population, to candidates between the ages of 12 and 20 years for free instruction. After graduating from the institute the applicants agree to teach school for a term of four years in the Provinces from which they were appointed, and in case they should leave the school before obtaining their degrees, or should their scholarships be canceled because of improper conduct or lack of application to their studies, or should they refuse to teach after graduating, then the Government is entitled to reimbursement from them of the expenses incurred in their education. Similar competitive scholarships to the number of 45 will also be issued under like conditions to girls between the ages of 14 and 20 years for entrance into the Normal Institute for Girls at Panama. — The POLICE force of the Republic of Panama has been organized into a single body composed of the following officers: One commander, or chief of police, 10 captains, 20 lieutenants, 72 second lieutenants, and 870 agents. The administrative employees of the police force consist of a general manager, an assistant manager, 2 doctors, 3 medical assistants, 2 drivers, and 2 servants. The central station is at Colon and the principal station at Bocas del Toro. The police law, which contains 68 articles, is published in Spanish in the Official Gazette of Panama of March 31, 1913. — Law No. 50, of March 24, 1913, prohibits the IMMIGRATION of Chinese, Turks, Syrians, and North-Africans into the territory of the Republic. — A law has been passed and duly promulgated by President Porras amending law 25 of 1906 concerning LOTTERIES and games of chance, and prohibiting the operation of same in the Republic under heavy penalties. — The department of public instruction of the Government of Panama has contracted with the Christian Brothers to take charge of the INSTITUTES FOR BOYS at Colon, David, Santiago, Los Santos, and Aguadulce for a period of two years from May 1, 1913. — A contract has been made by the department of public works with the United Fruit Co. to fill up the Almirante SWAMPS, and to put in sewers and waterworks in the town of Almirante. The Fruit Co. also agrees to erect a concrete wall on the seashore at Almirante and along the banks of Cedar Canyon, and to furnish Bocas del Toro and Almirante with ice at the rate of 0.75 of a balboa per 100 pounds. — A law has recently been promulgated concerning the REGISTRATION of property, mortgages, contracts, etc., in the Republic. This law repeals chapter 43 of the fourth book of the Civil Code, and all other contrary laws and amendments to same. — A law concerning PUBLIC INSTRUCTION, consisting of 104 articles, was recently

passed by the Congress of Panama and was duly promulgated in the Official Gazette of March 13, 1913.—The municipalities of Taboga and La Chorrera in the Province of Panama have been authorized by the Federal Congress to lease the islands within their districts, except such as the executive power may declare necessary for navigation and construction of shipyards, dry docks, wharves, and other public works. The proceeds of the leases are to go to the municipalities referred to.



PARAGUAY

A great deal of interest has been shown recently in the development of AGRICULTURE in the Republic of Paraguay. With this end in view, the press of the country is calling the attention of those engaged in agricultural pursuits to the value of a more extensive and thorough instruction in agricultural subjects. Paraguay is eminently an agricultural country, and there is scarcely a product of the tropical and subtropical zones that can not be cultivated to advantage within its borders. The great Chaco region is ideal for the growing of cotton of a long fiber and superior quality, to say nothing of the vast amount of forestal wealth and stock-producing possibilities of that favored section. If the current of instruction in Paraguay could be turned from the liberal professions to the practical and scientific study and practice of agriculture in all its diversified forms, it is predicted that there would be a surprising increase of wealth and prosperity in a very short time throughout the length and breadth of the land. Prof. Fiebrig, director of the agricultural farm of the Government of Paraguay at Santissima Trinidad, recently made a report to the Agricultural Bank at Asuncion of a trip of investigation to Villarica in which the farms and farming methods of foreigners and natives were examined and special note made of the cultivation of yerba mate, or Paraguayan tea, on the plantation of Sr. Mahaux, who is engaged in the growing of this tea in the neighborhood of Villarica on a large scale. The questions of proper soil and climatic conditions were taken up, and it was shown by the experience of two persons now occupied in its cultivation that neither water-soaked nor acid lands rich in humus are suitable for growing yerba mate. The expert referred to states that grape culture in the vicinity of Villarica is a decided success, one of the oldest and most successful vineyardists in that district being Sr. Carlos Voigt, formerly engaged in grape culture in Brazil, but who came to Villarica to go into the same business because of the excellent natural conditions existing in that part of Paraguay for cultivating the vine. Last year Mr. Voigt made more

than a thousand liters of wine of five different classes, all of which, according to the report of Prof. Fiebrig, were of fine quality and the best manufactured in the Republic at the present time. The Government of Paraguay is aiding the development of agriculture throughout the country in every way possible. One of the most practical measures adopted by it is the distribution to farmers at cost price, through the Agricultural Bank at Asuncion, of the best seeds of staple products obtainable, the main objects being to introduce and encourage new cultivations. Recently more than 5,000 kilos of seed potatoes were distributed to farmers throughout the Republic, and other seeds, such as those of Cuban tobacco, for instance, are continually being put within the reach of plantation owners and farmers for the purpose of bettering and stimulating the agricultural industry of the country.—The Consul General of Paraguay in Antwerp reports that the EXPORTS FROM BELGIUM to the Republic of Paraguay consist of all kinds of silk, woolen, cotton, and linen fabrics, felt hats, printing and writing paper, photographic supplies, cardboard boxes, bone and nacar buttons, drugs, paints, candles, combs, machinery, machine oil, cloves, perfumes, groceries, confectionery, wines, pharmaceutical products, and glass. Tobacco is one of the principal exports of Paraguay to Belgium. —Among the foreign visitors who have recently studied CONDITIONS IN PARAGUAY may be mentioned Waldimiro Loescher, a German engineer interested in industrial research, and Pierre Denis, a French university professor, who made a study of the educational system of the country. —Irwin F. Westheimer has been appointed VICE CONSUL of Paraguay in Cincinnati, Ohio. —According to a report to the department of the interior of the Government of Paraguay, the municipality of Ybycui has completed the construction of two BRIDGES, one over the Pasa Caballero Creek and the other over the Curzu Barrero Creek. —Sr. José Sosa, who has been studying architecture in France under a scholarship granted him by the Government of Paraguay, has received a diploma, recognized by the Government of France, from "L'Ecole Spéciale d'Architecture." After receiving this diploma Sr. Sosa made a special study of house hygiene in tropical countries. He proposes to return to Paraguay in August next to practice his profession. —The Agricultural Bank at Asuncion has organized a BUREAU OF AGRICULTURAL STATISTICS covering the entire Republic. The first report received by the bureau was from Itaugua. One of the principal farms in that district belongs to Hardy & Slaughter, who make a specialty of the cultivation of tobacco, sugar cane, maize, beans, pineapples, etc. They also have considerable stock on the farm and require in their agricultural operations the services of 200 oxen. —Early in May, according to press dispatches, the FERRYBOAT service of the Paraguay Cen-

tral Railway between Villa Encarnacion and Posadas was opened to public traffic. The maintenance of this service will be of great benefit to the railway freight and passenger traffic between Paraguay, the Argentine Republic, and Uruguay, and will effect a considerable saving in time in traveling by rail from Asuncion to Buenos Aires and vice versa. - The **MILITARY REGISTRATIONS** in the capital of Paraguay, made under the law providing for compulsory military service, numbered 10,226 up to the 31st of March, 1913. - Construction work on the **RAILWAY** from Borja to a point on the Parana River opposite Iguazu is being actively pushed forward. Some 1,500 laborers are employed on this work, and about 50 kilometers of grading has already been done. - The **CODIFICATION COMMITTEE**, of which the Minister of Justice of the Government of Paraguay is chairman, is actively continuing the work of revising the existing laws, and a new draft of the organic law of the courts is about to be completed. - The **REVENUES** collected in the Federal capital in March, 1913, were as follows: Imports, 158,927.19 pesos gold and 734,537.76 pesos paper currency; exports, 25,777.63 pesos gold and 15,460 pesos paper currency; internal service, 7.27 pesos gold and 59,629.84 pesos paper currency.



PERU

The Government of Peru has established a **DEPARTMENT OF AGRICULTURE** in the National College of San Luis Gonzaga at Ica. A three years' course in agriculture, including practical and theoretical instruction, is provided. The chief of the agricultural section of the college will prepare outlines covering the curriculum of the different years and submit same to the director of the college for approval. The purchase of the material and supplies and the salaries of the professors is to be paid out of the budget of the college. Candidates for admission to the agricultural section of the Ica college must not be under 14 years of age and must have completed the course of instruction in the primary schools of Peru. Native agriculturists have the right to visit the experiment farm of the college and are entitled to free conferences with the professors on agricultural subjects. - The average annual **IMPORTS** of Peru from Japan are about 300,000 soles. Up to the present time the exports from Peru to Japan have been very small, but the Peruvian consul at Yokohama thinks that a market could be worked up for such products as rubber, cotton, wool, cocaine, sugar, etc., by means of exhibits of these article in the Peruvian consular offices of the Kingdom. In 1909 Japan imported more than 1,000,000 soles of rubber, and the cotton imports

of that country in 1910 were more than 100,000,000 soles, so that it would seem that there is a good opening in Japan for a number of the staple products of Peru. — The Government of Peru has decided to sell to agriculturists, through the bureau of agriculture in Lima, ARSENATE OF LEAD, imported from the United States for use in combating agricultural pests, at the rate of 25 centavos per pound. — The AVIATION SCHOOL of Peru at Lima has chosen President Guillermo E. Billinghurst honorary president of the institution. — An appropriation of £500 has been made by the departmental board of Lima to be used in extending the PIER at Chorrillos to the point known as the Herradura. — The Government of Peru has authorized Othon Gastañeta, in representation of the railway and wharf at Eten, to make a preliminary survey of a RAILWAY from Lambayeque or Ferrenafe to Jayanca, and to submit same to the Peruvian Government for approval within the term of one year, during which time the Government will not grant permission to other parties to survey or build a railway between the places mentioned. A deposit is to be made by the concessionaire for the faithful performance of his part of the contract. — The minister of Fomento, on behalf of the Government of Peru, has negotiated a loan of £75,000 with the Bank of Peru and London in Lima, for the purpose of purchasing the POTABLE WATERWORKS of the Federal capital, and for acquirement by expropriation of the Santa Rosa ranch in the Ate Alto Valley for use in enlarging the water supply of the metropolis. The loan draws 8 per cent annual interest and payment is guaranteed from the net earnings of the water service in Lima, the Government reserving the right to liquidate the entire amount of the loan at any time. The potable water at present furnished the city of Lima is of good quality, but is insufficient in quantity to supply the ever increasing demands of the city. An analysis of this water by an experienced Peruvian chemist shows the following result calculated in fractions of a grain per liter: Carbonate of lime, 0.095000; carbonate of magnesia, 0.004780; oxide of iron, 0.002400; sulphate of lime, 0.077487; sulphate of magnesia, 0.022791; sulphate of soda, 0.016405; chlorate of sodium, 0.032725; chlorate of potassium, 0.004279; chlorate of lithium, 0.003113, and silica, 0.006000, making the total fixed matter per liter of water 0.264890. — The department of public works has been authorized to expend such sums of money as may be necessary to repair five bridges on the Chimbote to Tablonas RAILWAY and to supply the necessary rolling stock for the operation of freight and passenger trains up to kilometer 105 of said line. — The Government of Peru has arranged to develop the new Department of Madre de Dios by forming AGRICULTURAL COLONIES there, and has recently contracted for settling a certain number of families in that region. The Government will aid colonists in every way possible in

making the trip to the Department of Madre de Dios.—The Peruvian engineer, Carlos I. Lisson, has been appointed by the President of the Republic to represent the Peruvian Government at the Twelfth International GEOLOGIC CONGRESS to be held in Canada in August next.—Construction work on the Lima to Chilca RAILWAY is being rapidly pushed forward, the grading having been done as far as Quebrada Honda, about a league from the celebrated ruins of Pachacamac.—The Congress of the Republic of Peru has enacted a law providing for the construction of a branch of the Lima to Huacho RAILWAY between Oyon, Sayan, and Checras, and has authorized the President to use the tobacco revenues for this purpose.



SALVADOR

The Bureau of Statistics and the National Observatory of the Government of Salvador have published a pamphlet containing 159 pages, entitled "ANUARIO DE 1911" (1911 Annual), from which the following data are taken: Area of the Republic, 34,126 square kilometers; total population, 1,113,000; average population per kilometer, 33; exports of coffee in 1911, 869,050 pesos silver; school population (from 6 to 14 years of age) estimated at 173,495, of which 90,954 are girls and 82,541 boys.—The municipal council of the city of San Salvador has accepted the bases of the estimate submitted by Pearson & Son, Sucs., for the PAVING AND SANITATION of the Federal capital. The work is to be done subject to the inspection of experts representing the municipality. —The municipality of El Carmen, department of La Union, has imposed LOCAL TAXES as follows: Registration of dogs, 50 centavos per annum; sale of medicine, 75 centavos per month; stores of the first class, 1.50 pesos per month, and stores of the second class, 75 centavos per month. The municipality of Moncagua has levied a registration fee of 2 pesos per month for permission to sell medicine, and an annual tax on wooden and iron cane mills of 3 and 5 pesos, respectively.—Matriculation in the AGRICULTURAL SCHOOL of the Government of Salvador for the current year closed on January 31 last. This school, which is located near the city of San Salvador, has recently greatly increased its facilities for teaching, and has added to its able corps of professors and instructors a French veterinary surgeon who has been engaged in teaching veterinary science in the Republic of Mexico. Mr. Ludovic Thomas, a French engineer, is at present director of the school. A number of scholarships have been issued to pupils from different parts of the Republic. The majority of the matriculates

board at the school and a specialty is made of practical field work on the experiment farm of the school. The 1913 session of the Agricultural School of Salvador began on February 3 last. — The receipts of the GOVERNMENT PRINTING OFFICE of the Republic of Salvador in 1912 amounted to 172,385.40 pesos. The disbursements consisted in the payment of salaries to employees, 68,271.12 pesos; paper, 60,844.24 pesos, and miscellaneous expenses, 4,215.27 pesos, leaving a balance in favor of the Government of 39,354.17 pesos.

WINES were imported into the Republic of Salvador in 1911 to the extent of 155,629 kilos valued at \$28,563.38 gold. The countries from which these wines came are as follows: Germany, 66,398 kilos valued at \$14,733.85; Austria, 9,199 kilos valued at \$1,449.99; Belgium, 21,086 kilos valued at \$3,255.53; China, 212 kilos valued at \$73.42; Denmark, 5,223 kilos valued at \$1,140.80; Spain, 40,053 kilos valued at \$4,530.21; United States, 6,210 kilos valued at \$1,863.79; France, 3,055 kilos valued at \$800; Italy, 147 kilos valued at \$45.07; Mexico, 3,821 kilos valued at \$617.76; Portugal, 53 kilos valued at \$7.50; and Peru, 172 kilos valued at \$6.36. — In January, 1913, the Government PRINTING OFFICE in the city of San Salvador completed 211 orders, consisting of books, pamphlets, etc., to the number of 720,978 copies. The value of the paper consumed in this work was 3,420.35 pesos; setting up, 2,915.28; forms, 2,603.55; and binding, 746.62 pesos, or a total of 9,685.80 pesos. — Dr. Patrocino Guzman Trigueros has been appointed chargé d'Affaires of the LEGATION of Salvador at Tegucigalpa, Honduras. — The SCHOOL YEAR in the Republic of Salvador commenced on February 3 last, all of the primary schools of the Republic having been opened on that date. — The publication entitled "La Revista Lirica Salvadoreña" (The Salvadoran LYRIC REVIEW), edited in the city of San Salvador by Sr. Mathias Hernandez Mejia, issued its second number in the early part of the present year. The Review is ably edited and contains a number of interesting contributions of literary merit. — At a general meeting of the stockholders of the COOPERATIVE SOCIETY entitled "El Ahorro," which has its headquarters in the city of San Salvador, it was decided to pay a dividend of 7.50 pesos a share for the last half of the year 1912. — The municipality of Quezaltepeque has taken preliminary steps looking to the construction at an early date of a new MUNICIPAL BUILDING. — In December, 1912, the expenses of the San Miguel HOSPITAL amounted to 3,854.11 pesos. — The COLLEGE FOR GIRLS (Colegio Superior de Señoritas) at Sonsonate is under the able management of Lucrecia Peña R. The Federal Government and the municipality of Sonsonate assist in supporting this college. In addition to the regular curriculum instruction is given in dressmaking, embroidery and cooking.

URUGUAY

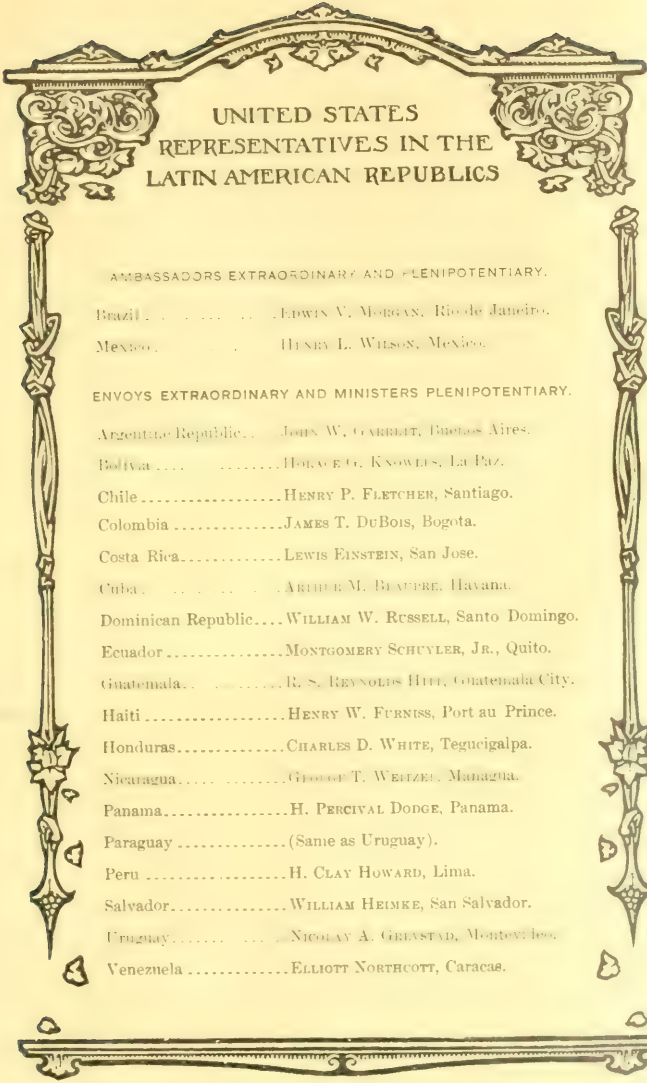
Dr. Hector Miranda, chairman of the general centenary committee in charge of the organization of the celebrations and festivities in commemoration of the **HUNDREDTH ANNIVERSARY** of the memorable instructions issued by Artigas in April, 1813, has organized departmental committees to work in cooperation with the general committee in the celebration of the centenary referred to. One of the most important of these committees is that having its headquarters at San Eugenio, department of Artigas, of which Dr. Atilio C. Bringoli is chairman. The instructions of Artigas demanded the absolute independence of the colonies, the establishment of civil and religious liberty, the guaranteeing of liberty and equality to all the people, the curbing of military despotism as a menace to liberty and sovereignty, and the adoption of a republican form of government. Such principles advocated by so noble a leader inspired the patriotism of his followers, aroused their enthusiasm, and aided them in their determination to succeed in establishing a government of the people. The committees propose to distribute a pamphlet explaining the historical importance of the celebration, and to invite individuals and societies to participate in the festivities in honor of one of the greatest events in the history of the nation.—The Government of Uruguay has been invited to participate in the **REFRIGERATION CONGRESS** to be held in Chicago in September of the present year, and to send a delegate to the **International Geologic Congress** which will meet in Toronto, Canada, in August next.—The **AVIATION** propaganda committee of Uruguay, with headquarters at Montevideo, is arousing a strong sentiment in favor of the development of that science in the Republic. The department of war of the Government of Uruguay is cooperating with the military and naval aviation committee in awakening interest in aviation in the army and navy.—Press reports state that the equestrian monument to be erected in the Republic of Uruguay to Garibaldi is to be made by Sr. Juan M. Ferrari, a Uruguayan sculptor.—At the **HORTICULTURAL EXPOSITION** in Montevideo monographs on garden culture and the best way to increase the exports of fruits were received up to March 10 of the present year. Money prizes have been offered for the best works presented, the decision to be made by a jury of award.—A plan has been submitted to the Government for the erection of a large **HOSPITAL**, with a capacity of 400 beds, in the city of Durazno. A fine location, consisting of 4 hectares, can be secured at a cost of \$12,000, which amount is avail-

able from the hospital committee fund. In addition to this sum a special law provides \$15,000 for the purpose. Should the plan be adopted and the hospital erected, it is claimed that it would tend to relieve the crowded condition of the hospitals at Salto, Paysandu, Rivera, Tacuarembó, San Eugenio, Florida, Fray Bentos, and a number of other places connected with Durazno by rail. — Investigations show that there are at the present time splendid opportunities for the development of the SUGAR INDUSTRY in the Republic of Uruguay. There is a large sugar factory at La Sierra in the department of Maldonado, and a refinery is in operation in Montevideo. The sugar-beet industry could also be developed in the republic, since there are large areas of land there suitable to the growing of sugar beets. — The President of the Republic of Uruguay has submitted to the National Congress for approval an ad referendum contract made with Sr. Francisco Piria for extending to the town of Pan de Azúcar the RAILWAY for which he holds a concession from the Uruguayan Government. — The revenues of the city of Montevideo from REAL PROPERTY in 1912 amounted to \$1,575,373.97, as compared with \$1,248,885.83 in 1911. The revenues on rural real property during the fiscal year 1911-12 aggregated \$2,748,287.39, as compared with \$1,733,541.08 during the previous fiscal year. — The drilling section of the department of industries of the Government of Uruguay has received three DIAMOND DRILLS manufactured by the Sullivan Co. of Chicago, one of which is capable of boring to a depth of 1,500 meters. These drills are to be used by the department in making subterranean explorations at different places in the country. — A German STEAMSHIP LINE using petroleum as fuel is to be operated between Montevideo, Buenos Aires, Asuncion and intermediate points on the La Plata, Parana, Uruguay, and Paraguay Rivers. All of the vessels of this line will fly the flag of the Republic of Uruguay.

VENEZUELA

RETURNING TRAVELERS from Venezuela, on calling at the Pan American Union Building, express themselves freely regarding the notable commercial and industrial progress now taking place in and around Caracas. The large number of excursion steamers calling at La Guayra have remained long enough in port for the passengers to make the journey of 23 miles by rail to Caracas; this wonderful car ride has delighted the tourists and the excursions will doubtless be the forerunner of much more travel to Venezuela. — The President of Venezuela has signed a decree authorizing the establishment of four METEOROLOGICAL STATIONS in the Republic. The places to be

nated are as follows: Merida, Ciudad Bolivar, Maracaibo, Calabozo. Daily reports will be made by the observers in charge and telegraphed to Caracas where, under the supervision of the minister of public instruction, this new weather service will be made of practical utility.—During the nine months ending March 31, 1913, 77 pleasure AUTOMOBILES and 19 commercial trucks were received in Venezuela from the United States. The automobile is rapidly winning its way as a useful and indispensable vehicle in the commercial development of the country, and the newspapers are giving wide publicity to some of the endurance runs, which are of frequent occurrence.—The newspaper, EL UNIVERSAL, of Caracas, for the 16th of March carries several large pictures of the NEW HOSPITAL Vargas, at Caracas. The exterior view shows a large, well-planned edifice with abundant shade trees in the immediate vicinity; while the interior views indicate the up-to-date facilities for treating the various maladies. Dr. Martin Herrera, a prominent surgeon, is also shown performing the first operation after the opening of the hospital.—The director of the National Library at Caracas has asked the press to aid him in securing the works of WRITERS AND AUTHIORS for use in the library, and such persons who have published books, important papers, or other matter are requested to contribute to the library's archives.—In the eastern section of the Republic there is a FRUIT known locally as the cuajo but which abroad is spoken of as the caiane. The cuajo fruit is about half the size of the hazel nut and can be lighted with a match and will burn for several minutes, giving off a very fragrant odor. Palm kernels is also another name for the product, which is found in immense quantities in Venezuela as well as in the Guianas.—In the EXPORT TRADE of Maracaibo the United States received in 1911 about 67 per cent of the total exports; in 1912 this amount increased to 70 per cent.—The Bolivar Railroad Co., an English corporation, is EXTENDING ITS ROAD from San Felipe, the capital of the State of Yaracuy, to Palma Sola, a distance of 27 miles; this extension will make another large coffee-producing area accessible for active exploitation.—Eight AUTOMOBILES and nine motor trucks have been imported into the Maracaibo district from the United States since January 1, 1912. Bicycles and talking machines are finding a ready sale and many other articles of United States manufacture are displayed in the shops.—The COPPER MINES at Tucacas shipped 1,248 tons of copper ore, valued at \$245,650, to England during 1912.—A company capitalized at \$193,000 is establishing a STOCKYARD at Ocumare de la Costa, and expects to introduce new breeds of cattle for improving the native herds of Venezuela; the company will also engage in agricultural industries along modern scientific lines.



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